NOBODY'S MONEY: INTRODUCING CHOICE-CARD

AN INNOVATIVE AND COMPREHENSIVE

APPROACH TO THE FINANCING

OF HEALTH CARE

by

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ABSTRACT

The need to attempt some type of control on the cost of medical care has become rather generally accepted. What hasn't been agreed upon is how this will be done in the long term. The current means of attempting control without the need of significant government intervention is the pro-competitive environment which is initiating sweeping changes, and is showing some early promise of reducing the rapidity of medical cost increase. Prepaid medical care is being emphasized as holding the key to this problem. In these systems we are relying on the physician to be both provider and rationer of care while entitling the patient to all "necessary" medical care. The patients have for many years been conditioned by the medical system to a perception of necessary medical care. The medical profession, however, is not as readily able to define necessary care, but has been given the responsibility to deliver it. As these new systems increase, an adversarial role is developing between doctor and patient. From the vantage point of nearly 25 years as a family physician, studying the response of patient and provider to the incentives of the system; the author has formulated a unique system of medical care financing. This system will employ a voucher concept, cost-effective incentives built in to the reimbursement structure for both physician and patient. It provides for a maximum of patient choice as the patient

and his physician work as a partnership to define and obtain necessary medical care. This concept is explained; logic for its theoretical basis is given. It is analyzed from the standpoint of the principles of the Health Policy Agenda for the American People and in view of the cost containment and health policy literature. Some suggestions of possible approaches to implementation are also made.

TABLE OF CONTENTS

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INTRODUCTION

Scenario one: A young physician, establishing his practice, was excited at the prospect of a private practice. His experience as a military physician had given him valuable training, but the "system" had its frustrations. Now he was a real doctor! One of his early patients was a young man with a nose injury. Remembering the excellent instruction of his Ear, Nose, and Throat Chief, a thorough exam was done. A minor fracture was suspected but there was no cosmetic or functional impairment. It would not be necessary to x-ray at this time, the doctor explained, pleased that he could spare the young man that expense. Detailed instruction of care and a follow-up appointment were given.

Later the doctor finished up some office details and turned his steps to the hospital across the street for evening rounds. As he passed the x-ray department, to his surprise, "the injured nose" was there getting x-rayed. Upon inquiring our doctor learned that he had failed to sense that his patient had felt the care delivered was inadequate for the lack of an x-ray. Dr. "P", an older and "wiser" physician, had been consulted and the desired x-ray ordered. Our aspiring young doctor had lost a patient in spite of delivering excellent, economical care. He reviewed in his mind the details of the case and still concluded that an x-ray was not medically necessary, but surmised that there must be other indications for

x-ray which Dr. "P" understood. Economic indications? What should he do next time he saw a patient with a nose injury, get an x-ray? He might as well, everybody else does and the patient's insurance will pay for it. His conscience bothered him for a while, but soon he became insensitive to the unnecessary costs he was generating. After all, it is essential to please the patient or you won't have a successful practice.

Scenario two: A young mother, upon concluding her visit at the pediatrician's office, was told by the receptionist that she surely came in frequently. "Oh, I have to", was her reply, "You see, I pay $80.00 (only one-third of total) per month for medical insurance, and this is the only way I can get my money's worth."

Scenario three A concerned family doctor spoke one day to a consultant about what appeared to be an excessive charge for such a brief consultation. There was also concern about a $40.00 charge for interpreting an x-ray, for which the radiologist had also charged. The consultant seemed quite taken back at the concern of the family doctor and replied, "Why are you concerned? The insurance pays for it."

Scenario four: A doctor new to the community became concerned about a policy of the major insurance carrier. The insurance company would reimburse the physician in his office for only the professional fee in doing a laceration repair, requiring that he provide suture, tray, and dressing. In the hospital emergency room, however, the tray, suture, and an emergency room fee was all paid , in addition to the professional fee. As a result, most trauma was being sent to the

hospital where excessive costs were being generated. This physician had occasion one day to visit with the president of the insurance company and explained his concern about the policy. "Yes," the president said, "we have got to get off that one and change the policy." However, to the dismay of the young doctor, ten years later the same policy existed.

Scenario five: A muscular, robust teen-ager in P.E. class collided with his head against another stoutly built fellow and fell to the floor unconscious for a brief moment. In the hospital emergency room he was evaluated and because of the "hospital policy" he was admitted. The attending doctor ordered vital signs and neurological checks hourly for four hours until he could reevaluate. The doctor was then informed that because hourly vital signs were ordered his patient would need to be in I.C.U. The nurses would be too busy to take hourly vital signs. It was "hospital policy." It was explained to the mother that the doctor did not feel an I.C.U. bed was needed and would incur unnecessary expense. The mother said, "My insurance will pay for it."

Scenario six: A genial man in the hospital preparing for surgery was examined by a cardiologist at the request of the surgeon. The consultation was very brief and cursory, but the charges were healthy. Upon receiving the bill our genial patient became less so. His concern that the consultant had not given service commensurate with the charges was expressed to the insurance company, but the insurance company paid the consultant in full against the protests of the patient.

Scenario seven: The patient was a mother of five children in her mid forties, obviously terminal with metastic carcinoma of the ceacum. Her lungs were full of large golf ball sized lesions. Ascites was so extensive as to present the appearance of a multiple pregnancy. Pain was severe, requiring frequent narcotic injections. An attempt at chemotherapy at the nearby university hospital had not altered the course of her cancer and she was at home with the obvious inevitability of death. Vomiting ensued and a doctor visited at the home diagnosing a bowel obstruction. It was stated by the physician that surgery would have to be done to relieve the obstruction. A hospital admission was arranged, a surgeon obtained, and surgery accomplished. In the course of the surgery a cardiac arrest was noted and successful resuscitation was done. A respirator was employed. With that mechanical support she was able to withstand the stroke that soon ensued. Some two weeks later, having had essentially no communication with her family during the terminal illness, she died. In the meantime she had suffered more than her suffering would have been had she been treated conservatively, and let the bowel obstruction be the terminal event, rather than the iatrogenically induced disease. The final hospital bill must have been near $30,000. The physicians involved felt they were doing everything possible to save her life. Others would have viewed this as a case of prolonging her death, increasing suffering, and a misallocation of scarce resources.

Scenario eight: A 17 year old boy ,whose family was receiving

welfare assistance, had a past history of a cleft palate and hare lip, expertly repaired as a child. He developed a slight drooping of the nasal ala on the right and an accompanying mild nasal obstruction. Surgery was done with surgeon's fee of $1750. It was nearly that much for the hospital. If he were inclined to desire a college education, would he possibly have rather used that money to fund his schooling? Would not society's needs be more effectively met by educating a young man, who might otherwise spend his life continually dependent on welfare assistance? If he were offered the money, in place of the surgery, would he take it? Would he take less money? If so, how much less?

Scenario nine: Without the knowledge of his primary care physician a patient had visited an Ear, Nose , and Throat specialist who was known to be very aggressive in the use of surgery and expensive allergy testing. His complaint was a mild chronic nasal congestion. Allergy testing and surgery was recommended and accomplished. Some time after this was done the patient was in his primary care physician's office and informed him of the prior surgery. He commented that it did not do him any good, his nose was still stuffy. "But it sure cost the insurance company a bundle of money." He, however, was not personally concerned about the expenditure of money for an evaluation and surgical procedure which did not benefit him.

The aforementioned anecdotes are just a few of the countless examples which have occurred daily in the United States. Significant sums of money are being spent in ways that are not cost-effective in

terms of patient health and well-being. This has been allowed to occur because of an evolved system that has had no effective restraint on cost. We have had a perception of an unlimited mass of money that is "nobody's money" and comes from nowhere, probably much like many perceive the federal budget.

Physicians eager to please patients accede to their perceived needs. The patient has had minimal financial restraints. Hospitals have been reimbursed on a cost-based and as billed basis. Insurance companies have not been concerned because they only need to raise the premiums, usually paid by the employer. The cost is tax deductible to the employer and not counted as income to the patients. Isn't this somebody's money? Doesn't somebody care about it?

Some have felt the delivery system is at fault and so "alternate delivery systems," Health Maintenance Organizations (HMO's), Preferred Provider Organizations (PPO's), etc., are on the scene. As the new delivery systems come into action they are having the effect of putting the doctor and patient in an adversarial position. Those who market the plans seem to be saying to the patients, "you can have all the medical care you need (want?)." In turn, they say to the physicians, "it is your job to see that they don't get it." I foresee this as having some serious implications.

Many new providers have come on the scene demanding through the legislature their share of this "unlimited resource" for health care that belongs to no one, and therefore no one acts responsibly toward it. Attempts are even being made in the legislature to mandate procedures and technological equipment for insurance

coverage long before it has been thoroughly evaluated and proven. It seems as though we feel that by mandating the insurance companies to provide a service, we can all of a sudden create the money to pay for it.

HISTORICAL BACKGROUND OF MEDICAL COST PROBLEM

It is surprising to many to realize that the practice of medicine in the United States has not always been a highly respected and financially rewarding profession. Paul Starr in his book The Social Transformation of American Medicine (Starr - 1982) gives a very enlightening and scholarly account of the changes that have been witnessed in this now powerful profession. In its beginnings all professional transactions were strictly between the patient and the doctor. The physician offered a service, and the patient paid a fee. There was no significant barrier to entry into the market, either in terms of educational expense or by licensure. With the increase in scientific knowledge, society and the profession became concerned about the qualifications of those who practiced medicine. This eventually led to licensure which also gave the profession economic protection.

With scientific advances in the field of medicine, it was recognized by society that medical care was of more critical value than just caring, and the emphasis shifted from caring to curing. The increased cost of medical care, and the perception of its increased value led to concerns of how to finance it. Bismarck of Germany in 1893 established the first system of national sickness insurance. This was soon followed by other European countries and interest spread to America. The United States lagged behind in adopting

insurance, especially by the government. National Health Insurance became a political issue just prior to World War One. Its proponents were never able to muster the political support to make it a reality. Private insurance became the means of providing financial protection in this country. Blue Cross, which eventually became the leading insurer, had its beginning in 1929 at the Baylor University Hospital in Dallas, Texas.(Rorem-1944) Over the years our system of medical insurance has evolved from historical accident and from interest-group pressure. (Enthoven-1978a)

The closest this nation probably came to having a national health insurance was in the 1960s. The Democratic Party, which has always been the most active supporter of government involvement in medical care, was in power with President John F. Kennedy as president. His assassination caused considerable emotional support for some of his ideas. With the election of Lyndon B. Johnson to the presidency in 1964 he took advantage of the mood to legitimize the issue . In his address to Congress he said, (Congressional Quarterly -1965 a)

> I believe this year is the year when with the sure knowledge of public support the congress should enact a hospital insurance program for the aged.

The administration sponsored bill, which was also called the King-Anderson bill, was passed by Congress in 1965. There had been some proposals similar to this introduced during the Truman administration, but without success. Three other major bills were

also introduced as alternatives to the Medicare proposal, which was another term for the Johnson administration proposal: The Byrnes bill was GOP sponsored; the Herlong-Curtis bill, backed by the AMA and also known as eldercare; and the Saltonstall bill. (Congressional Quarterly - 1965 b)

The Medicare proposal only included those over age 65, as did all the other proposals. Medicare did differ from the others in that it proposed the use of the Social Security system. The others were all combinations of federal and state funds, and contributions from the participants. This, of course, was not a national health insurance but was the best political alternative, and thought by its supporters to be a good start that could be extended in scope at some future date when the political climate would permit. It was this very reason that the AMA offered such vigorous opposition, spending what was at that time a record amount of money in lobbying expense for one quarter, $951,570. (Congressional Quarterly - 1965 c) This position was in contrast to the positive position taken earlier in 1914 by the AMA leaders with regard to national health insurance. (Starr-1984 p 242)

The resultant legislation was Medicare, which was linked to the Social Security System. Medicaid, a system of financing medical care for the poor, was also passed at the same time but being considered in the shadow of Medicare it was not given much scrutiny. (Wildavsky-1977)

The private insurance schemes which developed in the United States had various ways of determining provider reimbursement, but the method of fee screen, also called usual, customary, and

reasonable (UCR) was mandated by law to be used in Medicare. This method was first adopted on a trial basis by the Wisconsin Blue Shield plan in 1954 at the urging of its physician members.(Showstack -1979) Though not mandated by law, the Medicaid program in some instances, as chosen by states, also used the UCR method of provider reimbursement. Showstack has said this about UCR:

> The potential inflationary impact of UCR is felt by many to be its most serious defect. The fee-for-service system's general lack of incentives to be cost effective or to minimize inflation of unit prices, is exacerbated under UCR. Because future reimbursement levels are based on past charges, doctors have a strong incentive to bill at a high rate. The physician's usual charge is increased by submitting bills that are higher than the current usual charge. If this action is followed by enough providers in a community, the areas's customary charge is also raised.

With this method of provider reimbursement in use, the cost of medical care began to escalate very rapidly, as thoughtful observers would expect. The government emphasis in the early sixties had been on access to medical care, but by the end of the decade the emphasis was shifting to cost. On 10 July 1969 a report from HEW, known as the Finch-Egeberg Study, was issued and made the following points: (1) There was a need for governmental and private sector action to check the rapid rise in medical care cost. (2) The government was getting a poor return for its expenditures in health care. (3) The Medicaid program was a particular target for cost containment efforts. (4) The government would experiment with some local programs of prepaid insurance plans. (5) The government would bar certain providers who abused the system. (6) The practitioners were

asked to take more responsibility for cost containment. The report contained a statement which reflected the change in the political philosophy of the Nixon administration from that of the Johnson administration when the Medicare and Medicaid programs were enacted. It was a plea for action to prevent a more regulated governmental approach to medical care. (Congressional Quarterly -1969 a)

> What is ultimately at stake is the pluralistic, independent, voluntary nature of our health care system. We will lose it to pressure for a monolithic government dominated medical care unless we can make the system work for everyone in this nation.

Medicaid costs had a 57% increase in three years, which was three times as fast as the number of Medicaid patients. (Congressional Quarterly 1969 b) On 29 May 1969 the Senate Finance Committee reported amendments cutting back on the Medicaid benefits required by the states. This was introduced by Senator Clinton P. Anderson of New Mexico whose state had abruptly ended its Medicaid program because of its exhausted state funds. (Congressional Quarterly-1969c)

Concern for cost was not limited to the Medicaid program only. The Senate Finance Committee on 1 July 1969 held a hearing in which there was discussion of the increasing cost of Medicare. Emphasis seemed to be on the aspects of fraud and abuse. Attention was also given to lax governmental administration. A rather extreme example of a physician billing Medicare for $58,000 in house calls in one year, involving only 49 patients was cited. (Congressional Quarterly 1969 b) The concern about cost, fraud and abuse was an issue that was

able to enlist bipartisan support, and had very little problem with becoming a legitimate issue.

With the cost containment issue being effectively raised, at least on the level of the federal and state government, the next step was to formulate proposals for dealing with the problems. As with the approach to medical care access, there was not a comprehensive and rational analysis of the cost problem. Tentative approaches to the problem were expressed from many different perspectives. Dan Corditz in 1970 said, "The doctors created the system. They run it. And they are the most formidable obstacle to its improvement." (Corditz-1970) If this statement were true, we would not expect the physicians to be formulating many changes to a more cost effective system. Such has been the case. For the most part the profession has been content to take positions that would tend to maintain the status quo.

With the interest in medical cost containment growing, the proponents of national health insurance revived their efforts . The National Committee of One Hundred for National Health Insurance, with Walter Reuther, President of the United Auto Workers, as the president, was organized. (National Journal -1969) Three other proposals were also presented: one by the A.M.A. , another by the AFL-CIO, and Senator Jacob Javits also proposed one. During the Nixon campaign he had been opposed to national health insurance, but shortly thereafter took a less definite stand, largely as the result of the National Governors' Conference position in favor of national health insurance. This committee was headed by Governor Nelson

Rockefeller and thirty other republican governors. Doctor Roger Egeberg of the Nixon administration said that President Nixon expected that national health insurance would be enacted before the end of the decade. (National Journal -1969) There were still those who felt that the cost problem could be solved by increasing the number of physicians and expanding the hospital facilities .They seemed not to appreciate the manner in which the providers could create demand with the cost based reimbursment schemes.

In June of 1969 the Senate Finance Committee recommended a 5 year extension of the Hill-Burton Act, with a change in the emphasis from rural to urban needs. One year later Congress had to override a veto by President Nixon to pass a 3 year extension and provide the biggest amount of expenditure since the Hill-Burton Act was passed. (National Journal -1970 a) This was done at the same time that efforts to control and coordinate hospital construction were being developed. These efforts ended in federally mandated health planning councils in each state. In February 1971 President Nixon announced a new national health strategy - HMO's were to receive the support and encouragement of the government. President Nixon envisioned that HMO's would reverse the incentives for doctors and hospitals to benefit from illness rather than health. (Starr -1984 p 396) Interest in national health insurance was still present when President Jimmy Carter was elected. He, however, saw national health insurance as a great financial burden unless some means of cost control preceded it.

By the end of the Carter administration the legitimacy of government as a solution to the medical cost dilemma had been lost.

The government had embarked on its mission into health care with the goal to increase access, and this was accomplished to a great extent. However, because the government chose to render its financial assistance in the cost based manner, the resultant inflation of medical care costs began to have a negative effect on access. Aaron Wildavsky, in his interesting manner of writing, expressed it in these words: (Wildavsky-1977)

> Why should government spend billions for health care and get back not even token tribute? If government is going to be accused of abusing the poor, neglecting the middle class, and milking the rich; if it is to be condemned for bureaucratizing the patient and coercing the doctor, it can manage all of that without spending billions. Slander and calumnies are easier to bear when they are cost free. Spending more for worse treatment is as bad a policy for government as it would be for any of us.

The political mood of the country continued to be more conservative and in 1980 Ronald Reagan was elected President. There had been some changes in Medicare that would allow payment for prehospitalization diagnostic procedures. (National Journal -1970) President Reagan continued the trend to deemphasize care in the hospital setting and in September 1982 Medicare began to pay for hospice care. (National Journal 1982) His procompetition health plan was introduced in 1982 and featured limited tax deductions for health insurance premiums, use of vouchers with which Medicare patients could purchase care in prepaid health care settings, and the phasing out of health planning and PRO's. President Carter had earlier tried to introduce some competitive aspects to the medical care system with a scheme from Stanford economist Alain C. Enthoven, but was not successful. (Congressional Quarterly -1982) With the

nation's more conservative mood, and the political persuasion of Mr. Reagan, the competitive features were enacted. Congressional hearings began in February 1983 to promote the use of DRG's. This was a form of government regulation which would seem to be foreign to Mr. Reagan's philosophy, but was rationalized as a means of introducing competition. The idea had been used in the state of New Jersey on an all-payors basis, but was to be used nationally in the Medicare system. It is now in force and will be gradually phased in over a four year period. Fear of cost shifting to other private insurers has prompted them to consider this form of reimbursement as a means of self protection.

The present setting of medical care delivery and financing is one of very significant transition. The rulings of the Federal Trade Commission have set aside the time honored code among the medical profession that advertising was unethical. There has ensued a very different economic climate, that the doctors of former years would probably view in disbelief. We speak of terms that were just a few years ago not found in the medical literature. It was not until 1979 that the hospital literature index included the subject heading "marketing of health services." In 1982 the heading "economic competition" appeared in the literature index. (Levy-1985) Other new terms such as provider, consumer, and patient encounter are now heard. These not so subtle changes seem to herald the new era of competition which pits doctor against doctor, hospital against hospital, and medical plan against medical plan. It seems almost that the doctor and patient are assuming an adversarial role, as we use the

term patient encounter. In the midst of all this change, the public image of the physician continues to decline. Sixty-two percent of the public believed that doctors were too interested in making money in a 1984 survey . This was an increase from 55% two years prior. In 1984 only 27% of those surveyed believed that physicians' fees were reasonable, whereas in 1982 42% of the surveyed population felt that fees were reasonable. (AMA Newsletter 1985a) In spite of the rather general criticism, those included in the survey seemed to have a more positive view of their personal physician.

Perhaps not all the blame for the inflationary trend in medical costs can be blamed on the UCR method, but it would probably be a rare person who would argue that it was not a significant force. Certainly the fee schedules and benefit schedules that have been produced by third party payers have not been determined with consideration of the cost of production. (Showstack- 1979) This has given incentive for the providers to prescribe the procedures that are relatively more profitable. (Reinhardt-1975)

The effect of this method of reimbursement on hospitals was observed personally when the attempts of our community to obtain a hospital were frustated by the lack of funds. A proprietary hospital was invited to investigate the possibility of building and operating the hospital. They were very willing to do so but the community and medical staff developed some concern about how they would compete. They would be required to pay sales tax on all of their supply purchases, property tax on the building and equipment, borrow money to build the hospital, and pay a dividend to their stockholders. How

were they going to do this, when their largest competing hospital had been completely built with community and church donations? They paid no taxes and they were nonprofit with no stockholders to pay. When asked how they could successfully compete they said, "We don't have to compete. Our expenses will be higher and the insurance companies (including Medicare and Medicaid) will reimburse us more."

It was this interesting revelation that facilitated the author's full appreciation of the very perverse incentives that our method of financing medical care presented for all providers. Prior to this time he had lived in a world of naivete just wanting to be a physician and not be bothered or tainted by the economics of medicine. From that time on he made a more conscious effort to become knowledgeable of the intricacies of medical care financing. An increased amount of time was spent in observing the response of health care providers to the incentives of the system. As a result of many hours of contemplation, a concept of financing medical care was formulated in his mind. This concept will be introduced and analyzed later in this paper.

COST-CONTAINMENT: HOW AND BY WHOM?

There can be no return to the day of unlimited, or even extensive resources.(King -1985) It seems quite clear that the open-ended third party reimbursment schemes will come to an end. It is not a choice of controls, or no controls, but in what way will costs be controlled and by whom?(Fein-1985) Blue Cross and Blue Shield have made some rather drastic changes in their coverage. They are setting up PPO'S and HMO'S, have eliminated coverage for certain cosmetic operations, have replaced first dollar emergency room coverage with a major medical using a front-end deductible, denying payment for some admissions, and giving economic incentives for early discharge of obstetrical patients. (Wallen-1985) Because of the Hippocratic oath a physician is not in a position to limit the use of technology for his patient, especially when his patient is not directly paying for it. This situation has lead to a cost crisis and now the solution to access is the origin of our problem of cost. As a solution to this cost problem some societies, such as Great Britain, have limited the amount of resources available to the physician. He is then forced to select the most marginally beneficial uses of the available resources.

Various societies have approached the control of medical costs in different ways, and have arrived at different amounts of expenditure in their control efforts. Some have political goals in mind as they try to create a single standard of care for all people. This

seems to be an impossibility, unless the freedom of individuals to spend their money is unduly restricted. In England, as a result of the budgetary limitations of the National Health Service, the private sector of medical practice is growing very rapidly. This is of concern to the trade unions because it is a departure from their political ideal of a single standard of health care for all people. The government, however, welcomes it as a means of reducing government expenditures. British Health Minister Kenneth Clark said on a visit to the United States; "It seems to us that spending one's own money on health care is not a particularly antisocial way of spending it."(A.M.A. News-1984) The National Health Service of Great Britain has often been touted by politicians as the solution to our country's frustations. This plan was developed by Albert Beveridge with the assumption that there existed in a society a limited amount of morbidity and that it would decrease as equity of medical treatment was available. (Illich 1976 p 221) Beveridge had calculated that the annual cost of the Health Service would decrease as therapy reduced the rate of illness. (Office of Health Economics Prospects in Health Publication no.37 London 1971) Of this idea David Owen, England's Minister of health and social security, said, "This philosophy has proven hopelessly wrong; and demand far from being finite is now seen to approach the infinite .... All the evidence both nationally and internationally suggests that if need is not infinite it is certainly so large relative to the resources that society is able to provide now and in the future that we can never hope to meet it completely." (Owen-1976)

The United States has rejected a government controlled system to limit cost. Physicians have not had the inclination or the incentives to do so. Those who pay the bills - the government, insurers, and the employers are trying and have made some progress in recent years. Some of these changes were cited earlier. Those who actually benefit from a medical service, the patients, have been largely left out of the proposed solutions except to say that they should pay more out of pocket, which is not highly popular. (Equitable-1985) Enthoven says,"The benefits of individual health care services are enjoyed primarily by the individual and his family, and he should be allowed a large measure of choice concerning it. The important public purposes of universal access to good-quality care can be pursued most effectively in a decentralized private system guided by an appropriate structure of incentives and regulation to support competition."(Enthoven- 1978a) How can we as a society discharge our social responsibility to protect the people in their health, lessen the economic impact of medical care, and still allow a maximum of individual and personal choice?

The current political climate is in favor of allowing and encouraging competition to develop. Enthoven seems to be the protagonist of competition and Ginzberg the antagonist. Economists in general probably favor reliance on market forces. (Rheinhardt-1985) Of price competition, Ginzberg has said, "What we do not need is a radical reform centered on price rather than on quality. It is not necessary, not desirable, and not even feasible."(Ginzberg -1983a) This comment indicates the assumption

that there is a good correlation between cost and quality. In his years of medical practice the author has not been at all convinced that there is a consistent relationship. There are reservations about introducing competition as a means of cost control in the face of the provider's ability to expand the demand for their services. This could lead to lower unit costs, but higher total cost. (Ginzberg - 1982) Havinghurst has made this statement about the value of competition.

> To the market advocate's mind, the complex trade-offs of the sort required in medical care cannot be addressed well in a political system in which unproven benefits have high symbolic value, costs are hidden, and interest groups possess the balance of power on specific choices. Imperfect as it may always be, the competitive market represents potentially at least a situation in which the consumers can see the benefits of economizing in tangible terms and in which each economizing choice benefits the individual involved rather than a government or some other deep pocket. (Havinghurst - 1981)

The competition that is envisioned by Enthoven is a price competition between different types of delivery systems. (Enthoven - 1978a) Enthoven's plan, in its most simplified form, is as follows: 1) Congress alter the tax law so as to put a ceiling on the amount of health insurance premium that is tax deductible to the employer and the employee. 2) Employers must offer a choice of three different plans, each meeting minimum standards of coverage. An employee could pocket the difference between the most expensive plan and the cheapest, if he chose the latter. 3) Rely on co-insurance or deductibles to make the patient cost conscious at the point of service. 4) Special provisions to be made for health insurance coverage of the low income people.

The writings in the literature envision competition between hospitals, physicians, delivery plan and insurers. The author would introduce another form of competition, competition for the money that is earmarked for medical care. This doesn't mean price competition alone, but that other uses for the money would be competing with a portion of that which is now being spent on medical care. That portion of the health care dollar to be subjected to competition would be that which is now being spent on more marginal items. This form of competition could exist along with the other types mentioned, but could have the potential to control the utilization of technology, especially new and unproven methods.

Since the resources of society are limited and medical needs seem limitless, someone somewhere will have to choose. Having largely rejected the role of government to make the decisions, who will make them in our country? Perhaps the patient and his doctor together could make the best decisions, if given proper incentives. Is it not possible that we are overlooking the possibility of a significant contribution to the cost concern problem from the patient? (Bateman- 1984) Statements such as the following are plentiful in the literature, "The alternative to government regulation is a voluntary cost program by physicians and hospitals." (Dresnick -1979) Does the entire burden of cost control lie with the providers?

If success is to be found in meeting the challenge, it seems to the author that all of those involved will have to contribute to the solution. It has been quite revealing to observe the discussions of medical cost containment. Most of the suggestions made by various

parties involved someone else doing the changing. The government wants the providers to change their habits. The physicians want the patients to be less demanding. Patients think that doctors and hospitals should charge less. The hospitals, now that DRG's are here, want the doctors to order fewer tests and keep the patients in for shorter stays. This is a change from their expectations of physicians in earlier days.

Most plans seem to make the assumption that a patient cannot be an informed consumer, and therefore his insurance company or his employer is acting as his agent in negotiating for the cost of his medical care. This can and has accomplished some reduction in the price of medical care but even if the price were significantly reduced, this would only be a temporary solution. This would do nothing to get at the very core of the problem, increased utilization and technology. Maloney in his President's address to the American Surgical Association pointed out that if we could execute a 20% across the board reduction in the price of medical care, the price of a hospital bed in 1987 would be 194% of the 1967 cost instead of 212%.(Maloney-1981) Our current approach seems to assume that the same amount and type of medical care will be given (Thompson -1983) and the only thing to do is reduce the price per unit. What would be helpful would be to introduce competition for the money that is ear-marked for medical care. The patient should be changed from a claimant (Brewster-1979) to a consumer. Patients will be required, in some instances, to have less medical care, and so they must be given something in return. They also need to have some

guidance as to where they can reduce their consumption most judiciously. In our current insurance systems patients pay premiums, or they are paid for them, and the only way they can benefit from them is to utilize a medical service. Such behavior is typified by scenario two in the introduction. Since it is human nature to want to get one's money's worth (maximize), the natural tendency is to consume more care. When care is insured it reduces the direct cost to the patient and will thereby increase his consumption. This is known to the economists as moral hazard. Ivan Illich made this comment about prepaid health care, "People forego their own lives to get as much treatment as possible."(Illich-1976)

The patient should be caused to consider cost at two points. The first is when he purchases his medical insurance. The second time is at the point of service. It is the point of service choice that is most controversial. Can patients make choices about their medical care? The suggestion that they can and should, would have been regarded,by the author, as heresy 20 years ago. Now, however, he regards this as a very integral part of the solution to the cost crisis. Guze has written that even though patients know much less about medicine than their doctor, they are entitled to participate in the decisions about their care.(Guze-1981) That patients have a responsibility and are capable to participate in their health care decisions is a major thrust of Robin's book.(Robin-1984) Freymann has included patient education as one of three ways of attacking the cost problem of medical care.(Freymann -1980) Brown has some reservations about significant patient involvement saying:

> "One insures against risk precisely because one does not want to be confronted with such willingness to pay questions in the unhappy event of illness. People buy health insurance first because one never knows what objective conditions (illnesses) may strike; second, because, one never knows exactly how one may feel about the value of alternative treatments for various objective conditions of varying degrees of severity; third, because one does not feel capable of deciding and does not want to be forced to compute benefit-cost ratios attaching to various treatment -illness combinations when an illness poses these questions. Anxiety levels are apt to be too high and the professional expertise of the patient too low to permit rational decision making at such a time." (Brown 1981)

Brewster gives his perception of a patient's need at the time he is ill. " The trouble is that the patient, when he thinks something is wrong with him, is not an economic man. He is a fearful, ignorant, miserable, helpless creature. He does want health, almost at any price. He is not looking for what the economist call a 'provider'. He is looking for professional judgment .... in short he is looking for a trustee, not a 'provider'. " (Brewster -1979) There is much in the literature of opinion concerning how patients will react if posed with the need to be more involved in their decisions, but not much evidence as to how they will and do react.

The Rand study has shown that increasing the cost sharing for the patient reduced the consumption of medical care with no significant reduction in the health status of the people. (Brook -1983) (Newhouse- 1981) Usage of emergency rooms has been shown to be decreased by cost sharing requirements. (O'Grady -1985) Consumers show a significant lack of price sensitivity in selecting a hospital.(Inguanzo-1985) It may be argued that this lack of cost sensitivity is because hospital costs have been mostly covered by

insurance. People pay 8% of hospital costs out of pocket but 37% of physicians' charges are met by their own payment.(Brown-1981) For services that are ordered by the doctor, if the patient cost sharing is small, the effects are transitory or virtually nil.(Hall- 1966) In California a study with welfare patients paying $1.00 for each out patient physician visit and $0.50 for each prescription caused a significant increase in the cost of in-patient care for the co-payment group.(Roemer-1975) From this we may learn that any cost sharing should be considered in light of its impact on delaying care that may incur greater illness and expense at a later date.

To further study patient behavior with cost sharing in a somewhat unique setting, the author proposes an experiment under the following conditions. At this time the author will explain the concept which he will call Choice-Card . He feels that it very much meets the recommendation of the Lewin study, a study of the health care system in Utah. The study has made this suggestion:
"... modifying traditional health insurance so it establishes more appropriate incentives for consumers while still protecting them from the economic burdens of disease and so it more closely integrates service delivery and financing decisions."(Lewin-1979)

INTRODUCING THE CHOICE-CARD CONCEPT

This approach involves the following features:

1) A specified amount of money (voucher), equivalent to the cost of a first dollar insurance policy , or the maximum amount that would be provided for any other health insurance plan is committed to Choice-Card enrollees.

2) The agreement between the insurance company and the policy holder provides for periodic payment. The payments will consist of two parts. Part one would cover the premium for health insurance. Part two would cover a contribution to a discretionary fund.

3) The insurance is structured to discourage utilization of services that are of questionable or unproven value and have been shown in studies to provide marginal value as used in our current setting. The disincentive will be in the form of requiring these items to be paid largely from the discretionary or personal funds. The insurance structure would also encourage those interventions which will be most effective and reduce future medical expense.

4) The insurance company would issue cards as certification of insurance coverage . These cards would also serve as a credit card in the purchase of medical services.

5) The insurance company would honor the charged bills and pay the provider in full.

6) The insurance company would accept as a claim that part of the bill that is covered under the insurance provisions.

7) That portion of a charged medical service not covered by the insurance agreeement will be subtracted from the patient's discretionary fund.

8) If expenses for medical care are incurred that are not covered by the insurance provisions and the discretionary fund is not sufficient to cover the cost, an advance at interest would be made as in a charge account.

9) The savings resulting from wise usage of medical resources and decreased utilization accrues to the patient in the discretionary fund accumulating over a lifetime.

10) The discretionary fund is invested by the insurance company and the interest accrues to the patient.

11) The discretionary fund is portable and goes with the employee if he changes employment.

12) A portion of this discretionary fund above a certain reserve level would be available to the patient for other consumer items.

COMMENTS ON THE BASIC CONCEPTS OF CHOICE-CARD

At the inception of this experiment there would be a commitment to allow for this medical insurance plan the same amount that would be allowed by the employer to finance a regular policy that was being made available to other employees. The money paid to the insurance company by the employer in the patient's behalf would be divided into two different funds: the insurance trust portion and the patient discretionary fund. This discretionary fund would be considered the patient's money and would be drawing interest to his account if unused. This discretionary fund would be available from which the patient could pay his required portion of incurred medical expenses. It would also form a pool from which all participants could borrow, if needed, for their medical expenses. In early 1985 there was a company in Indiana by the name of Medical Bankcard Corporation of Indianapolis that marketed a medical credit card.(AMA News-1985c) If this is successful it may be possible that they would offer to be the financing organization for credit beyond which the discretionary fund would provide. A recent newspaper report indicates that another company, General Electric Credit Corporation, has also entered into the provision of credit for medical care. (Deseret News-1986) This discretionary fund would belong to the patient. It could be regarded as a Medical IRA, (Rogers-1985) (Goodman-1984) and could be transferred with him in the event of a

job transfer, or would be a cushion in the event of unemployment. Perhaps he could use it to pay his share of health care premiums. (Brewester-1979) In order to help the patients realize that this money in the discretionary fund is indeed potentially theirs for other purposes, it could be made available for purchase of other nonmedical items when the reserve accrued above a certain minimal level. It would be considered a prudent move to require a higher level of reserve in the discretionary fund as a person gets older. If there was a significant amount of savings in the discretionary fund it could provide a sizable resource available when they reached Medicare age. If a patient or his family wanted to have services that were poorly covered by the insurance portion they could borrow when the discretionary fund was depleted, and in the event of the patient's death it could be repaid from life insurance benefits. A possible variation and broadening of the scope of this concept would be to make life, disability, and possibly long term care insurance available, as funds accumulate in the discretionary fund from conservative use of medical resources.

This discretionary fund would be the patient's money to be used at his discretion for medical care and it is hoped would introduce an element of responsibility on his part as to how health care resources are expended. A Study by Golfarb in which he analyzed length of stay and usage of ancillary services, concluded that ability to pay did not influence usage of services. (Goldfarb-1983) This study could be used to argue that patients will not be cost conscious. The conditions and incentives operating in that study would be

significantly different than those operating in the Choice-Card concept, and such a conclusion would not be justified.

All services for which an insurance company would assist would be paid on a defined benefit basis (fee schedule) and not on the cost-based and as billed basis. Health Care Financing Administration has accepted a joint proposal by Harvard and AMA to do a study on a revised relative value system. They want to consider the viability of a fee schedule to replace the current Medicare system of reimbursing physicians.(AMA News-1985e) This endeavor is an acknowledgement that the open-ended systems of the past are coming to an end. The defined benefit of Choice-Card insurance may differ significantly from the current rate in many instances. The consumer would be aware that for essentially every purchase he made, there may be some contribution required of him. This would be for each service and at all levels of care. This would eliminate the lack of cost effective behavior on the part of the patient after an annual deductible or co-payment is met. The following factors would be considered in determining the fee:

a) Is the condition for treatment potentially life threatening?

b) Does it threaten future function? If so, what function and how vital is that function from society's point of view?

c) Will delay of diagnosis or treatment likely incur greater expense or impairment in the future?

d) Is the procedure thoroughly developed and by scientific study shown to be effective? Is the proper use and the clinical setting well defined?

e) How well can the diagnosis and, therefore, the need for the procedure be confirmed by others, as a means of monitoring? As an example - appendectomy, as compared to insertion of ventilation tubes in ears.

f) Is the procedure totally or in part cosmetic?

g) What is the cost-effectiveness ratio? Some have suggested third party insurers pay only for those procedures with a ratio above a certain specified level.(Thompson-1983)

h) What is the consensus among the medical profession regarding the need for the procedure or the need for hospitalization? Eighty to ninety percent of all hospital admissions are for procedures and diagnoses that occur at a highly variable rate from one hospital area to another. (Wennberg- 1984a) This variation is not confined to the United States or to one type of delivery system.(Wennberg-1984b) Others have been able to validate the same conclusion.(Barnes-1985) With the help of this research those surgical procedures and those medical admissions with wide variations of frequency can be identified. When the frequency is so varied the question may be asked as to what rate is correct?(Wennberg-1986c) There is not good evidence for a conclusion, but there is no evidence that there is any difference in the health of those people in areas of low rates.

For those identified circumstances of significant variation, the payment from the insurance fund would be set at a lower amount. This would leave the patients with a greater amount to pay from their discretionary or personal funds. The incentive for the patient would then be to stay out of the hospital or to avoid surgery, and he would

exert some pressure on his physician to use alternatives. The fact that a fee is set for a procedure does not obligate the provider to accept that fee. He only needs to convince the patient to pay more than the insurance fee. Various types of procedures would be paid as follows:

Laboratory and X-ray diagnostic studies: These would be paid entirely from the patient discretionary fund. This would include all diagnostic procedures, including endoscopy.

Hospital charges: Paid on a Diagnostic Related Grouping (DRG) basis with modification according to the epidemiological evidence of the variability in incidence of admission in various localities for that diagnosis. After a period of time, in the hospital equivalent to the average for that diagnosis, further payment would be based on a probability of benefit from continued hospitalization. The suggestion that we make and implement medical decisions on the basis of probability has been suggested by Leaf. (Leaf-1984)

Surgical fees: Many factors would be used to compute these, such as length of training, time required, skill, risk, time involved in the procedure, and practice expense which would include malpractice insurance. Also included in the factors could be a reasonable income based on an average case load.(Roe-1985) The assignment of a surgical fee would also take into consideration the epidemiological evidence of significant variation in incidence of the procedure. Remuneration based on complexity should be abandoned. What may be considered difficult to one may not be to another, and this may in reality tend to allow those who may be less skilled to charge more.

This particular method has led to flagrant abuse of the intended purpose as most doing claims review can attest. Again it is emphasized, the fact that a fee may be set by the insurance does not obligate the surgeon to the fee, but he must negotiate the difference with the patient. This particular approach to the remuneration of procedural skills, as compared to cognitive skills, could do much to correct a very serious problem for the medical profession - to reduce the disparity in physician income according to specialty. When Paul Beeson, M.D., addressed the Utah State Medical Association Convention in October, 1984, he was asked what he felt was the most significant problem facing organized medicine. His answer was, the large discrepancy in payments for cognitive services, as compared to the procedurally oriented surgical services. If Dr. Beeson is correct, and there are many who agree with him, any change in our system of medical care financing should address this problem. Past AMA President Joseph F. Boyle has said that the AMA needs to direct its attention to physician income and fees. He notes that some pediatricians are earning just 1 1/2 times the income of garbage collectors and some family physicians will earn only slightly more than a deck hand on an oil tanker. He expressed concern over the outrageous charges and incomes of some physicians. (Boyle-1985) The emphasis and efforts of the government to encourage generalization of medical practice are largely negated by the incentives of the procedurally oriented reimbursement schemes.(Showstack-1978)

The circumstances under which the surgery is done will also be

considered in setting the surgical fee. Many times surgical attempts are made when there is no reasonable hope of the patient surviving or being benefited by the procedure. Under such circumstances the insurance trust would not pay for the surgery. The author would propose that in these instances computer assistance be employed to give probabilities based on the past experience of prior patients with similar clinical findings and conditions. (deDombel-1986)

Payment for Medication: Medications that are primarily symptomatic would not be reimbursed from the insurance but required to be paid by the discretionary fund. Long term therapeutic medication would be paid for from insurance. Conditions, such as hypertension where we have reasonably good evidence of the ability to prevent onset of problems that will lead to greater disability, morbidity and increased medical expense, if not adequately cared for, would be fully funded from the insurance portion. Diabetes Mellitus is also such a condition, though the evidence that treatment avoids later medical complications is debated. It seems quite clear that by careful management, episodes of diabetic acidosis and hypoglycemia can be diminished, and thereby decrease the related medical costs. Immunizations would be included as an insurance benefit.

In making a medical purchase, the patient would use a credit card and when he agrees to a service and the price for that service, his signature on the transaction record obligates the insurance company to pay the provider. The insurance company would pay their obligated portion and from the patient discretionary fund would obtain the remainder. In the event that the patient discretionary fund was

depleted, the patient would be advanced the resources much as in a credit card charge transaction.

This feature of placing the patient in debt to the insurance company and not to the provider is justified by the fact that payment of a physician's fee is related more to the patient's inclination to pay than their ability to pay, as any practitioner can attest. Even popular magazines in giving financial management advice recommend paying the doctor last because the patients have nothing that the physician can repossess. This attitude among patients has led to a more aggressive posture on bill collecting by physicians, which has not been in their best public interest. In the Choice-Card system, if a patient was inclined to default on their loans this could put their insurance coverage in jeopardy. Lest this approach be thought to be harsh you may be reminded that the insurance coverage will be structured in such a way as to cover quite well those essential and clearly beneficial services.

This plan would, in effect, take some of the money now going to health insurance premiums and make it the patient's money, or potentially theirs. The cost of insurance premiums would be less because of the selective coverage in contrast to the open-ended policies of the past. It would require payment of personal or discretionary funds for those conditions and procedures not demonstrated to be effective, and if foregone would not be likely to have an adverse effect on the patient's health. In those conditions, where a clear cut benefit is demonstrated, that care would be paid with none or minimal personal or discretionary funds. This avoidance

of an across the board cost sharing of all medical costs could do much to obviate the concerns of decreased access to those of lower income. The inherent structure of the insurance payments would encourage the proven interventions, by requiring less cost-sharing, and discourage the use of unproven practices, or those of marginal benefit by requiring larger cost-sharing.(Wennberg -1984d) This design of insurance coverage would have a built in educational feature for patients.

If it was suggested by a surgeon that a carotid endarterectomy be done in an asymptomatic patient with a bruit, and the surgeon charge was $1800 with a hospital charge of $4500, the finding of a patient that the insurance paid $200 for the surgeon and a $500 DRG for hospital would serve as a red flag to the patient that further investigation and a second opinion might be obtained.

There has been a 467% increase in the incidence of carotid endarterectomies of the head and neck from 1971 to 1982 . The evidence of the effectiveness of this approach, as compared to medical therapy, has not been clearly demonstrated. (Dyken-1984) In a review of 431 endarterectomy procedures done in 16 different hospitals there was a demonstrated mortality rate of 2.8% and an intraoperative stroke rate of 8.6% . There was a combined morbidity and mortality rate of 9.6%. Fifty percent of the patients in the study were asymptomatic prior to surgery.(Brott-1984) This means that if one had 100 patients with asymptomatic bruit and operated on them, within one week's time ten of them would be either dead or with a stroke. This evidence suggests very strongly that in an attempt to

prevent strokes, the therapy may, in reality, be causing more harm than the natural course of the disease.

Until it is demonstrated that a therapy is clearly beneficial, should insurance be paying for it? There is accumulating thought that attempts to contain medical costs should be directed at those marginal, unnecessary, and unproven ventures.(Angell-1985) We should make efforts to provide coverage for those clearly effective modalities. The fact that the United States is spending nearly four times the per capita amount on health care as England and one-and-a-half times as much as Sweden,(Angell-1985) without any demonstrable difference in our health as a nation, may be additional evidence that we can reduce our expenditures without impairing health.

Diagrams showing a comparison of Choice-Card, (Figure 1) traditional insurance, (Figure 2) and a health maintenance organization (Figure 3) are shown. In these examples it is assumed that the employee is contributing to his health insurance, though this is not always required. Some sample transactions are also shown (Figure 4).

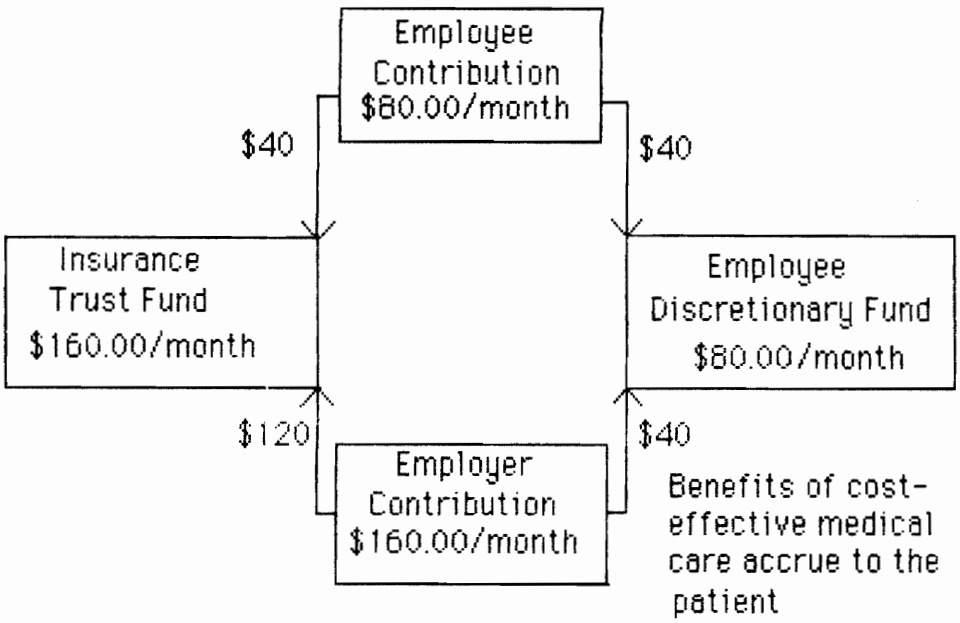

Figure 1. Choice-Card Setting

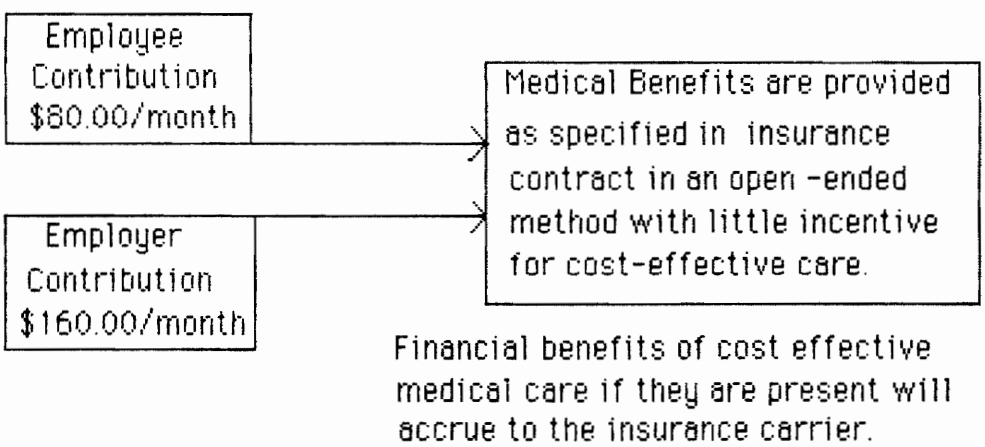

Figure 2. Traditional Insurance Setting

HMO SETTING

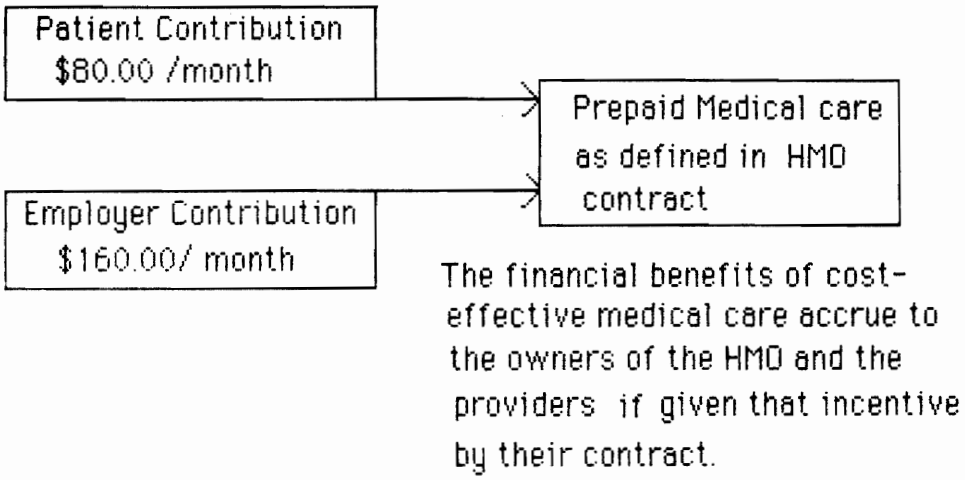

Figure 3. Health Maintenance Organization Setting

Patient needs appendectomy: Surgeon charges.....$650.00

Insurance trust pays...$625.00 Patient obligation.....$25.00

Hospital charges.....$1500.00

Insurance pays....$1450.00 Patient obligation.....$50.00

Status of patients discretionary fund.....$500.00

Total of patient obligation for surgeon and hospital $ 75.00

Amount remaining in patient discretionary fund.....$425.00

Patient- well corrected hearing by hearing aid desires tympanoplasty:

Surgeon charges....$1200.00

Insurance pays..... $200.00 Patient obligation...$1000.00

Hospital charges....$1250.00

Insurance pays .....$210.00 Patient obligation....$1040.00

Status of patients discretionary fund.....$1600.00

Total patient obligation for surgeon and hospital..... $2010.00

Amount of advance credit to patient.....$ 410.00

In this transaction the discretionary fund is depleted. The amount advanced would be repaid at interest over a twelve month period.

Figure 4. Sample of Some Patient Care Transactions

WOULD THE PUBLIC ACCEPT SUCH A RADICAL CHANGE?

The Choice-Card concept would require a significant change in the role of patients as consumers of health care. How willing will they be to accept changes? The Equitable Health Care Survey of 1985 gives some interesting insights: (Equitable-1985)

- In excess of 70% of employers report changes in their health plans in the past 3 years.

- 50 % of these plan changes involved increased deductibles for patients.

- 53% of employees whose cost sharing had increased in the past 3 years regarded that increase as acceptable.

- People earning less than $15,000/year are much more adversely affected by increased cost sharing.

- Changes made so far appear to not have shifted costs from employer to employee, but have altered their behavior to reduce over all health care expenditures.

- Reduced access to health care by increasing cost sharing has not been shown to be significant. The effects and potential effects are more dramatic on low income employees.

- Most employees are affected by cost sharing. However 30% do not pay deductibles, 26% do not pay co-payments, 40% do not contribute to their insurance premium.

- It is more acceptable to employees to contribute to their

premium than to have deductibles or co-payment.

A prior, 1983, Equitable survey revealed that the public was remarkably aware and concerned about the problems related to health care financing and health care services. This survey also suggested that, contrary to popular thought, the American public was willing to accept a broad range of proposals and ideas on medical cost containment. (Equitable-1983)

The follow up study in 1985 confirmed that as the changes did occur there was a significant proportion of the public that was willing to accept them. This evidence that there is not a significant public opposition to more financial involvement in their medical care would seem encouraging that they may be accepting of the Choice-Card concept.

POSSIBLE IMPACT OF CHOICE-CARD ON OTHER SYSTEMS

Not all patients would be willing to participate in Choice-Card, but it would appear from public surveys that many would. If a portion of the population were to engage in financing of medical care this way, much information of value to government, society, and insurers could potentially be gained.

In the current setting, HMO's and alternative delivery systems are expected to provide an answer. The term alternate delivery system is used to describe what should be used to achieve cost-containment. In the author's opinion there is nothing wrong with the delivery system. It is an alternate financing system that is needed. HMO's generally provide similar services as people obtain in a traditional setting at a reduced unit cost; they tend to match the benefits of insurance companies. With the exception of tonsillectomy and adenoidectomy., the amount of discretionary surgery done by HMO's does not seem to be significantly less and it does not appear that they obtain much of their savings by a decreased length of stay. (Luft-1978c) It also appears that care of rheumatoid arthritis in the HMO setting does not lead to decreased usage of expensive inpatient and outpatient procedures.(Yelin-1985) It is quite likely that there will always be insurers that provide generous benefits, largely first dollar coverage, and that there will always be some citizens or corporations who can, and will, afford this coverage. Assume, also,

that one or some of these insurance companies provided artificial hearts as a benefit. The HMO's would be under considerable market pressure to match this benefit. If they did so, they may provide them at a decreased unit cost, but they would be providing a new technology that would significantly increase the capitation cost. This would have happened without any direct expression from the individual citizens as to how willing they were to finance such technology.

The Choice-Card concept would provide a very generous amount of money by the standards of other nations for an individual's health care. The patients would then exercise their individual choices as to how they used their discretionary fund and their credit. If they chose to spend considerably more than the capped amount and forego other items, such as homes, automobiles and entertainment, to purchase artificial hearts and other expensive health care technology, society will have gained significant information about how the citizens value health and health care. The converse would also be true. If the patients showed a clear preference for other items by using their excess discretionary funds, and were not willing to incur debt for medical care beyond that provided by the insurance; it could then be said that perhaps there has been excess spending for medical care. What better way to determine an appropriate amount to allocate on health care?

This type of a system would give incentive to offer care at lower cost and to approach problems in the most cost effective manner. With the past open-ended system of financing medical care a

new technology or treatment was not required to be delivered in a cost effective way. It was more of a political battle to influence the insurers to pay for it. Once that decision had been reached the incentives for reducing the cost or for cost-effective utilization were minimized. If a new technology needed to meet the test of clearly demonstrated effectiveness, clearly determined circumstances for its use, and patient willingness to pay for it, it is quite likely that much more refinement would be witnessed before wide acceptance was realized.

Those who would be utilizing the new technologies would be those most affluent and who could afford them. Undoubtedly this would meet with some public criticism that the affluent could obtain care not available to others because of economic barriers. This would be a reversal of the roles of many years ago when the author was in training. Then the indigent patients were the ones who had new techniques tried on them and the public then complained that the poor were being used for experimentation. This would be very likely to reduce the speed with which new technology would be introduced, and undoubtedly there would be some lives lost by that delay. This, however, would be counterbalanced by the increased safety and understanding of complications of these innovations before being so widely introduced. Also, it would prevent the misallocation of scarce resources in ineffective ventures as has been seen in the past. The misallocation of scarce resources can also cost lives.

This is a painful thought that there may be the loss of some lives that could have been saved by the more rapid introduction of new

methods. There, however, would be a reduction in mortality from the too rapid introduction of new techniques. The mortality is always highest at the time of a new technology introduction, before complications are fully appreciated and before the subset of patients most benefited is determined. With money for new surgical techniques less available there would be less incentive to expand the techniques to a larger number of institutions. Whenever a new cardiac surgery team is developed, the early mortality and morbidity rates do not match those of the established units. If there is concern for the possibility of some unnecessary deaths occurring, let us not forget that our society is willing and, in fact, subsidizes the production of a product (tobacco) that leads to the premature death of 1000 people each day. A slowing in the introduction of innovative treatments could never approach that magnitude of human loss. Our society is quite accepting of someone for economic reasons, putting themselves, or someone of their own family at risk for reasons not related to medical care. They may balance the cost of some new tires now versus driving on the bald tires for a few more months. They may defer the relining of their brakes because of economic reasons, and thereby increase their safety hazard. They may elect for economic reasons to purchase a small automobile with a smaller purchase price and less operating expense, when the automobile safety studies quite clearly indicate that they would be much safer in a larger, more expensive automobile.(Brown-1985) They may not invest in a smoke alarm system at home, and we accept these decisions made with economics in mind and which put people's lives

and well-being at stake. If people were required to make choices between health care and money for other uses, there is concern that they might neglect health. Brewster says he has sufficient confidence in the hypochondria of man that this will not be a serious problem.(Brewster-1979)

It is the author's opinion that some of these preceding examples have a much greater probability of causing human harm, suffering, and unnecessary death than the omission of a CAT scan in evaluating chronic headache,or the omission of an endoscopic exam in the evaluation of a patient with upper gastrointestinal bleeding. In fact, the evidence indicates that the routine use of upper gastrointestinal endoscopy in acute bleeding may cause an increase in complications and not provide any direct benefit to patient care.(Eastwood-1981) No public outcry should be justified if that omission is elected by the patient with the advice and input of a physician who recognizes the unique aspects of that individual patient's case. One who has weighed with proper incentive the probability of obtaining clinically helpful information in the care of the patient versus the expenditure of funds that come, not from the endless monetary supplies of the insurance company or the government, but from the resources that belong to the patient.

However, if a physician is unilaterally involved in making direct decisions that put others at some increased risk, however small, that is a very different matter. This seems to be derived from a societal expectation of physicians, and also from an individual's aversion to being responsible for injury or misfortune to others. This feeling of

greater responsibility for others than for oneself is particularly strong among physicians. It seems to the author that as long as the patient is insulated from some choice in containing medical cost, and the entire burden is placed on the physicians, success will not be forthcoming. If, perhaps, the cost were reduced without patient input, the decisions made along the way may not reflect or conform to the values of the individual citizens. Personal preferences (implicit judgments) are to be favored over explicit judgments in medical care. (Schwartz-1973) As an example, Schwartz notes that in choosing air travel versus train travel one weighs cost, convenience and increased speed, against the slightly increased risk of death by accident. Choice-Card could also give opportunity to observe for evidence of decreased health and well being of those who consumed less medical care. These citizens would have made a choice, and society should not feel morally responsible if there was demonstrable ill effects. We tolerate self-destructive behavior in many other ways: tobacco, alcohol and accidents in dangerous sporting activities.

As the writing of this paper was in process, the tragic accident of the spaceship Challenger occurred. Some of the expressions about that event indicated the heroic nature of these people who were willing to risk their lives in the search for new information that may be of potential value to mankind. The author indeed feels that they were heroes involved in a dramatic way. Should we not also think of individuals who would be willing to forgo the application of new unproven, but potentially beneficial, technologies in their behalf as heroes? They would be helping us to learn information that could

benefit us as a nation. There is much evidence to suggest that in spite of our significantly greater expenditure on health care we as a society are not particularly any healthier. How much should we spend, and how are we going to determine this? Choice-Card may be one way to learn.

This concept will put a patient in a different role, and many would not want to be as involved in medical decision making. They may prefer to let the doctor make all the decisions. It has been pointed out that when a person is ill, or afraid that they might be ill, that they are not inclined to be considering price, or to be involved in making decisions about their health care. (Relman-1980) Ginzberg has said that he does not feel that patients can be persuaded from purchasing the services that a physician has advised. (Ginzberg-1980) There are, however, many people who are not content to leave it all to the physician. It may be more cost effective to alter by education the attitude and expectations of the recipients of medical care, than to satisfy those wants by manipulating the health care system. (Maloney-1981) What a physician recommends is frequently not based on sound medical logic, but in response to the economic incentives presented him and his perception of what the patient expects. If, as Ginsberg states, the patient will follow a physician's advice, a system is needed that will give the physician incentive to give good advice medically, as well as economically. Also needed is a system to evolve a more informed patient.

An active, increased interest in patient information is manifest by a patient information center in New York City that is thriving and

growing. After the initial center in New York, there are now patient information centers in four other major centers. (Cancila-1984) Fifty-six percent of the American public feels a need for more information about medical care, and 80% of them wanted a system in which health information was available through doctors and hospitals on a regular basis. (Sommers-1976)

Maloney says that when the public becomes aware of the difficulty that we are having in demonstrating a relationship of health care delivery and health, they may elect other nonmedical items, such as home ownership recreation or children's education. (Maloney-1981) Choice-Card could introduce a method for making that election.

PATIENT EDUCATION: HOW AND BY WHOM?

For a patient to have his medical care financed with the Choice-Card concept would require much more patient education than is currently available. How will this be done and by whom? There are several possibilities, none of which are exclusive of the others.

Employer: If the program were offered by a self-insured corporation, the task of patient education and information could be done by the corporation. Inasmuch as the corporation is self-insured, it is possible that a role by them in patient education, which would stress reduced utilization, could be perceived by the patient and public as a conflict of interest. This could be minimized by the corporation being willing to commit to a specific amount of money to the medical care for each employee. If, by careful utilization by the patients, the cost of insurance premiums should go down, the amount of money saved would not accrue to the company, but would be shifted to the patient's discretionary fund.

Another possible problem with the corporation assuming this role is that this may appear to put the corporation in the role of practicing medicine. This concern was expressed to the author in a personal conversation with a corporate executive. Corporations must be sensitive to actions which would appear to put them in a competitive role with private practicing physicians.

Physician Educator: It is also possible that the role of patient

educator and information source could be a legitimate business endeavor by physicians who do not engage directly in patient care. They might serve as a source of objective medical information to the patient. They could employ various other health care personnel, such as dieticians, nutritionists, home health care specialists, etc. Their role would be to provide information about various medical options with information about how well and critically evaluated these options have been studied. Having as their objective the provisions of information and the answering of specific questions by patients, and not the provision of that service, perhaps a more unbiased presentation may be obtained, than from a physician who stands to profit from the performance of a test or procedure.

There would be a cost for this information in time and money. Those who would elect to join the Choice-Card plan in the first place would most likely be willing to commit the time. The financial costs could be met in several possible ways: (1) a given amount of money could be provided each year as an insurance benefit to be used in patient education; (2) they could use funds from their discretionary fund; (3) personal funds could be expended. As noted earlier, such information centers are in existence and people are willing to pay for this service.

Insurance Company: The insurance company could play this role of education source, but there could also be a potential conflict of interest perceived. One advantage of the insurance company acting in this role would be the single source of information for insurance coverage details and medical information. From personal

conversations with insurance executives the impression is obtained that they would not be particularly interested in this role.

Government Agency: Another possible source for the medical information would be a government agency. There has been a precedent set in the role of government as a source of information by the extension service of the United States Department of Agriculture. This approach, however, could and most likely would be, interpreted by the medical profession as entering into their turf. This would also be true for the insurance company involvement.

Primary Care Physician: Another method of providing patient education would be from the patient's primary care physician. In the author's opinion this would be the ideal way. The term doctor has its root in the latin word "docere" which means teach. Most people think of a doctor as one who is trained to diagnose and treat disease, and his role as a teacher is largely neglected. There is certainly very little taught to physicians in training about their role as a teacher. Our current system of physician reimbursement does not give economic incentive to educate patients, and as a result there is not much effective patient education being done.

In spite of this fact, some physicians regard patient education as an invasion of their profession. (Del Giudice-1985) As the author began the practice of private medicine an older physician gave him some advice that was well intended to help him "succeed" as a physician. This advice, however, was somewhat disturbing to him. The older physician's recommendations seemed all calculated to create a dependency in patients by requiring frequent unnecessary

return visits. His advice was to encourage patients to feel that their problems were of greater magnitude than actuality, and to encourage the belief that only he (the physician) could handle their problems. If a proper role of a physician is to educate, and one of the goals of education is to develop independence in his patients, that advice seems inappropriate to a physician. It, however, was very sound economic advice, as he could evidence.

Newton states that it is the first task of a physician to teach his patients the following (this certainly suggests creating an independent patient):

> To understand health is to realize that it is not identical with 'Feeling good'; that it is unrealistic to expect to feel good all of the time; that depending on individual circumstances we may have to expect quite a bit of feeling bad, even outright pain as a part of the human condition; that the history of the human race suggests that our capacity for coping with pain is a lot larger than we tend to assume; and that a personally developed ability so to cope developed by practice, is a substantial part of real health. To value health is to decide upon a style and pattern of life that will maximize the ability to cope largely by minimizing the body's need for outside help.(Newton-1979)

To accomplish effective patient education by the primary care physician it would be desirable to alter the form of primary care physician reimbursement to a capitation type. Gabel has noted that in his opinion capitation is a method of payment suitable for primary care physicians only. (Gabel-1979) Moloney has mentioned the great potential of a generalist to reduce the demand for high cost technology, but cautions that a too shallowly trained one could actually increase the use of technology through specialty consultations.(Moloney-1979)

When the physician tends to profit from services provided, he may lose his objectivity in providing patient information and advice. He also is not in any way rewarded for expending the time to educate. Why should he teach a young mother about the nature of virus illnesses and the ineffectiveness of penicillin therapy? It will only educate 30 office visits out of his practice for that one family each year. Perhaps if the primary care physician could be regarded as a financial manager of health care resources, and not a provider of care only, then his role and system of reimbursement could be seen in a different perspective. This would also reduce the incentive for primary care doctors to have extensive laboratory and x-ray, from which they are tempted to profit. It is of interest that it has been regarded as generally unethical for a physician to have a pharmacy and profit from the prescriptions that he writes, but not considered so to have technology from which he profits. The physician generally holds the patient much more captive with regard to technology than he would with regard to prescriptions.

This idea of regarding the primary physician as a manager of medical resources was first introduced to the author in a conversation with a management consultant who was employed by a large national accounting firm. Initially there was discussion of physicians' income versus accountants'. The author had learned that some of the partners in the large accounting firms had incomes in the $150,000-$200,000 range annually. The management consultant expressed that if his physician was paid $150,000-$200,000 per year he would regard that as excessive. It was described how his company

could objectively arrive at a fee for their accountants' services. If they studied the operation of a corporation, and suggested some courses of action that would save the company $1,000,000 in taxes, the company would be happy to pay 10% of the savings to his firm. The fact that a physician may have saved ten lives a year was mentioned, and the question posed as to how much that was worth? The given answer was that you can't put a value on human life. Indeed putting a value on human life is difficult, and attempts to do so by various methods have resulted in very different answers. (Hapgood-1980) (Blomquist 1981) We also need to consider the quality of life and how much that is worth. Physicians are much more frequently improving the quality of life than saving it. Answers to this question are not any more easy than to the value of life. (Avorn-1984)

Perhaps if the primary care physician was regarded, not as a saver of human lives or an improver of life quality only, but also as a manager of financial resources, a more objective method of valuing his services may result. This would tend to leave the decisions of how much patients value life and quality of life in the hands of the patient and his physician. If those who deliver medical care are to be involved in a debate with those who pay for it, and they most likely will be until resources are infinite, why not make the rules of that debate as clear as possible? Let that debate be between the doctors and the patient, and let's give the patient a professional unbiased advisor and advocate who needs to weigh his advice both economically and medically.

The United States is now spending approximately $2000 per year

for each man, woman and child on medical care.(Angell-1985) The Department of Health and Human Services reported the figure for 1984 at $1580 average for each person in the United States. Considering the primary care physician as a financial manager for 1000 people at $1800 per year, (an average figure between the two mentioned annual amounts) he would then have $1,800,000 to manage. If a primary care physician were paid 10% of that amount for providing primary medical care, and also acting as a financial consultant on the use of those resources, he would be paid $180,000 per year. Assuming an average overhead is 50%, that would be $90,000 net income for the physician, which is just slightly less than the average income for physicians in the United States. This, of course, has not taken into account the difference in age of patients and the difference in medical expenditure according to age. This example is admittedly very crude in its monetary detail and is given only to introduce a general concept. If, however, the income for the primary physician was not totally commensurate with his provision of medical services, but also on the provision of economic advice and patient education, we could introduce an incentive for him to teach each of his patients about healthy life-styles and cost-effective medicine. This change in his income incentives would enable him to offer a less biased approach to his decisions. The physician would be required to balance his recommendation in terms of his patient's physical well being and his patient's economic well being. The cost benefit approach to medical care seems more possible with the increased emphasis on the primary care physician. (Spiegel-1984)

Some physicians would have concern that it is unethical to consider cost when caring for people. Ethicists think not. (Jonson-1978) Mechanic expressed his concern about some of the current changes of health care financing that are shifting the physician's role from advocacy for the individual patient to greater responsibility for fixed budgets. (Mechanic-1985) Placing the physician in the role of economic advisor to his patient and making that "fixed budget" his patient's budget would put this concern in a different perspective. The inevitability of fixed budgets seems obvious.

The primary care physician's reimbursement would be more neutral as to the setting in which care is delivered. The current system has introduced a strong bias for an in-patient setting with regard to physician reimbursment. This change in primary care physician incentive, combined with an insurance reimbursement system for hospital care which will give patients incentive to avoid that expensive care setting, would tend to reduce the potential adversarial role of the physician. If the physician were to make recommendation for a less expensive way of care, the patient would not perceive the doctor as personally benefiting, as is the possibility in some of the current HMO's. Conversely, if the recommended course was to follow a more expensive pursuit, the patient would be less likely to perceive the physician's incentives as being to generate income, than if in a strictly fee for service setting. His physician, however, could point out that the patient could benefit economically by choosing the more conservative approach.

Eisenberg and Rosoff, in an intriquing article on physician

responsibility for unnecessary care, have made some interesting legal observations that may have application in this setting of a primary care physician acting in a role as economic advisor, as well as physician to his patient. In order to most accurately convey the thrust of their reasoning the author will quote rather extensively from their article.

> Compounding the lack of financial incentive for fee-for-service physicians to contain costs, the law currently places on doctors no legal responsiblity to see that services utilized are economically justifiable. Traditional tort law (i.e., malpractice) judges the physician only on the medical correctness of the treatment rendered, not on its financial soundness. Thus, a doctor who, in disregard of the financial implications to the patient, provides or orders unnecessary services has no liability unless these services cause physical harm to the patient.
>
> A 1973 Pennsylvania case, Albert Einstein Medical Center vs. Lipoff, illustrates the situation. Following her doctor's advice, a woman spent nine days in a Philadelphia hospital for therapy for a peptic ulcer. Since her doctor advised her that hospitalization was necessary, she was understandably distressed when Blue Cross refused to pay her hospital bill, claiming that utilization review had concluded this care was not "medically necessary." Her attempt to hold her doctor contractually liable for the cost of her hospitalization failed, the court holding that her claim founded in tort, and that she could recover only by proving that the doctor's treatment was medically unsound. That it was economically unsound, in the opinion of the physician's peers, was irrelevant to a tort claim.
>
> Contract law, on the other hand, turns on the understanding of the parties to a given relation. If a particular doctor knew that his patient thought him to be making economic as well as medical judgments in recommending treatment modalities, that understanding would become a part of the implied contract between them. Many courts and legal scholars regard the doctor-patient relation as being primarily contractual. Such a characterization could be used by a progressive court to fashion an implicit contractual obligation for the physician to practice economically sound medicine. Contract law thus provides a potentially more flexible avenue than tort law for stimulating the physician to consider the cost effectiveness of diagnosis and treatment.
>
> Closely related to the expansion of contract law responsibility is the legal doctrine of "estoppel," which could also be used by courts to impose greater financial responsibility upon physicians. Estoppel

> makes one person liable to another when, by words or actions, he causes or knowingly permits another person to rely upon him to that person's detriment. A doctor who induces his patient to undergo a certain treatment, while having reason to believe that the patient is relying upon him to make a sound economic judgment about that treatment, could be held liable for the consequences if he did not, in fact, make such a judgment.
>
> A third legal approach to increasing physicians' responsibility for costs is through the rapidly expanding concept of "informed consent." Since the landmark 1972 decision of Canterbury v. Spence, many states have adopted a tort-law standard that requires the physician to disclose to his patient all the information that the patient would consider material in deciding whether to undergo the recommended treatment. It seems likely that patients consider the scope of their health-insurance coverage a factor material to their health-care decisions. Thus, the modern rule on "informed consent," like the estoppel approach, would require the doctor to discuss economic consequences of proposed treatment with his patients. That the patient has not expressly asked for this information does not necessarily relieve the doctor's obligation to provide it.
> (Eisenberg-1978)

The Choice-Card concept would be expected to minimize the type of behavior observed in a patient for whom the author was acting as primary care physician. (Refer to scenario nine) In the Choice-Card plan, that type of surgery and work up would have been very poorly reimbursed by the insurance plan. He, as a participant, would have been instructed to learn from the surgeon, the diagnostic and the procedural codes to be used. A check on the insurance benefits in this particular instance would have made it clear that, if he elected to have the surgery, the greater portion of this cost would be borne by his discretionary or personal funds. The author feels that had his personal funds been used, his nonchalant attitude about the expenditures would have been otherwise. It is also quite probable that if he were aware of the need for his large personal contribution

for the surgery, he would likely have sought advice from his primary care physician before proceeding. In that event, the advice would have been that the evidence was not strong that he would be benefited by the procedure. The primary care physician would have been acting as a financial advisor and a teacher of his patient, and because he was being paid on a capitated basis would have been available without charge to present this advice.

This is different from the gatekeeper concept where the primary care provider can actually prevent the insurance company from paying for a service by not referring the patient or authorizing the care. The physician also may have a financial incentive to not make the referral in a gatekeeper arrangement. This position of the primary care physician as an adversary is a very uncomfortable position for both. In the Choice-Card plan the primary care physician would not be able, and would have little financial incentive, to prevent the patient from proceeding. His obligation would be to clearly indicate the potential risks and benefits, both financial and physical. The patient would indeed have his choice, but would need to accept the consequences. If the physician recommended not to pursue a course which he felt to be a relatively ineffective use of his patient's resources and the patient proceeded, the consequences to the patient would be financial, a decrease in his discretionary fund.

Choice-Card would, in effect, be reversing the trend that is presently observed in PPO's of the patient's paying a capitated fee and the physician charging on a fee-for-service basis. This would provide for the patient to pay fee-for-service, except for his primary care,

and the primary care doctor to be capitated in his reimbursement. How the patients pay for their medical care and how physicians are paid are separable issues. Not recognizing this has prevented us from developing innovative ways of paying physicians. (Mechanic-1985)

If a primary physician was placed in the role of being physician and financial advisor to his patient, with less or minimal incentive to provide lab and x-ray facilities, this would provide an excellent opportunity for him to invest in the ability to provide computer assisted decision analysis for his patients. A computer decision is more consistent and is not influenced by inadequate time, fatique, or a recent unfortunate outcome of a similar case. We, as clinicians, allow our personal experience to influence us greatly. However, our personal experience may give us a perspective that is not in harmony with a broader view of the subject. (Gorry-1973)

A physician speaking of cost containment says, "We need to do this through our own involvement, for only we know where to apply ourselves to be most effective while interfering least with quality and essential services. Failure to take this step will leave us vulnerable to external forces which have different agendas and priorities. It is clearly up to us." (Zuidema-1983) It may be debated that only physicians know where to cut, but it is certain that they have great expertise and that medical cost containment will not succeed without them. It then seems imperative that we strive to give appropriate incentives for them to be cost effective.

It is very difficult for broad ranging political decisions to have valid application to all individual circumstances. The best place for

exercising cost containment is when the individual physician is working with an individual patient with a specific medical problem. Ginzberg has stated that true cost containment is a reduced flow of real resources into the health care system without a diminution in useful output that would adversely affect the satisfaction of patients or their health status. (Ginzberg-1983b) Does this not imply a significant role for patient choice?

The speciality physician could continue to charge, as they do now, fee-for-service. The insurance fund reimbursement would be considerably different in many instances from what currently exists. The provider is, however, not bound to accept the insurance payment. He needs only to convince the patient to use his discretionary or personal funds to meet the difference. In this bargaining position the patient will have access to the assistance of his primary care physician for advice, and also as a negotiator for his dealings with specialty physicians. In scenario three the family physician would have had more credibility with the specialist if it was the patient's discretionary money used to pay the unreasonable charges.

It is commonly perceived by primary care physicians that the charges of specialities are excessive. Because insurance reimbursement most commonly pays specialty physicians' fees, the primary care physician has not had incentive, or been able to act in the interest of his patient by suggesting lower fees. Such difficulties are suggested in scenario three in the introduction. This expanded role for the primary care physicians would give them some legitimacy for advocating lower specialty physician fees. The role of a primary care

physician in assuring cost-effective care is also recognized by Rivin. (Rivin-1985)

Enthoven has stated that fee-for-service reimbursement has the advantage of free choice of provider, but does not give the patient opportunity to benefit from prudent health care choices. (Enthoven-1978a) Choice-Card would allow free choice of physicians, fee-for-service, and the patient could also realize benefits from being cost effective.

The author has entered into this discussion of primary care physician reimbursement by capitation as a means of placing the physician in a role as an educator for his patient. He thinks this has merit, but may not be essential to the Choice-Card concept. If the primary care provider was paid on a fee-for-service basis it is still likely that his behavior would be altered by the cost consciousness of his patient. When a physician suggests, or as is more often the case, tells his patient of the need to get a lab or x-ray procedure, the patient's response may be different. With the insurance reimbursement being technology neutral, the patient will be trained to ask reasons for the physician's decision to do the study. When the physician is aware of the patient's cost concerns and that his personal or discretionary funds will be paying for it, he may be willing to reevaulate his recommendation. This is observed presently when a physician encounters a patient who has no medical insurance. The current mind-set of physicians is that most patients have insurance that is technology biased. Their usual approach is from that perspective and often have not established firm grounds for their

recommendation. When confronted by a patient who does not have that type of insurance coverage, a physician will often find acceptable more economical alternatives to a previously suggested course.

This same factor may be evident in the establishment of surgical charges. It is common that when a surgeon learns the patient has no insurance, the fee is considerably lowered. Also, if the surgeon learns that a patient's insurance pays a fee significantly less than his usual charge, there is possibly a fee reduction, or the surgeon may acccept the amount of the insurance payment.

To make a more informed patient, and provide the basis for a good discussion and better understanding between doctor and patient, the patient should attempt in his visits with doctors to have the following questions answered. In relationship to diagnostic studies these questions would be considered appropriate:

_What information is hoped to be obtained by the study?

_What are the risks inherent in the study?

_What is the probability of getting a positive test, assuming I do have the suspected disease?

_What are the implications of the test missing my disease?

_What is the probability of the test falsely identifying me as diseased?

_What are the implications to me if I was falsely identified as diseased?

_If the test wasn't done, what would you do in my case?

_What are the implications of omitting the test now? Are there any problems that are of high probability from which we

cannot recoup, if passage of time should make the performance of the test more imperative?

In relationship to a therapeutic course, these questions might be considered:

- What is the natural history of the disease, if no therapy was given?
- What is the goal of the prescribed therapy?
- What is the probability of the therapy achieving the intended goal?
- What are the potential side effects or complications of the intended therapy,and their probability?
- If I were to experience any of the side effects or complication myself, would I still consider the therapy or operation to be worth it?

EXPECTED IMPACT ON MAJOR FACTORS IN MEDICAL COST CRISIS

Technology. A reading of the literature on medical cost containment seems to place expanding medical technology at the top of the list. (Moloney1979) (Lee-1978) Increased use of clinical laboratory tests is due to the following factors: (1) Advances in medical knowledge. (2) Increased insurance coverage. (3) Automation and increased convenience. (4) Positive financial incentives. (5) Training, personality, habit, and social environment. (6) Defensive and preventive medicine. (7) Misunderstanding of test results by the doctor and the patient. (Fineberg- 1979) Showstack in his analysis of the medical cost crisis and the contribution of technology to the problem said:

> We would caution against the interpretation of this report as either an indictment of physicians who order procedures and tests or as a suggestion that physicians should enrich themselves by increasing the number or types of services offered in their offices. The intent of this report is to make explicit for the purpose of public discussion of health policy, one of the many factors that lead to the ordering of or the performance of medical care services. This analysis does not suggest that physicians are paid too much, but that the system by which physicians' services are valued needs to be considered in the light of its effect on the delivery of medical care. The established relativities favor technology over personal care, laboratory utilization over physician time.(Showstack-1978)

Technology has become somewhat of a "sacred cow" in the medical field. Third party reimbursement for technology and procedures had increased 50% from 1975 to 1978, while physician

reimbursement had increased only 20%. (Abrams-1979) This has been a very strong incentive for physicians to enter the specialties with a procedural orientation. The current bias is to assume new technology is beneficial and the burden of proof is to show that it is not. This should be reversed. (Robin-1984)

In the Choice-Card concept there would be no insurance payment for a new technology until critical controlled studies have clearly shown its benefits, risks, and indications. A clear evaluation of the incidence and implications of false positive studies would be insisted upon. When and if reimbursement of a new procedure was decided upon, the actual costs of performance and production of the procedure would be considered in determining the amount of payment. Shalowitz suggests this in regard to the introduction of new technology.

> We recognize that new technology has a great impact on the health care costs. However, one cost containment idea that I would like to propose is that new papers about new procedures and treatments should be published only with full descriptions of appropriate application and expected health benefits and only if cost implications are fully described. Discussion should include expected effects on the system as a whole as well as on individual patient care, the locus of treatment and the length of stay.(Shalowitz-1980)

There is considerable evidence that much of what we learn from laboratory tests even with sick patients, screening aside, contributes little to patient care. Dixon and Lazlo conclude that on the average only 5% of hospital laboratory tests altered patient care, or confirmed the existing course of therapy. (Dixon-1974) A retrospective study in an emergency room setting (Bloomgarden1980)

considered 32% of the laboratory tests to be unnecessary in clinical decision making and 20% of laboratory tests ordered were not considered justified on any grounds. A study by Meyers concluded that 22% of laboratory tests were ordered unnecessarily and 26% of nuclear medicine studies were ordered innappropriately. (Meyers-1985)

The attempts described in the literature to reduce utilization of laboratory procedures have been largely directed at altering physician behavior. (Fineberg-1979) Some of the various methods used or suggested have been educational programs, (Lawrence-1979) financial risk sharing, (Eisenberg-1978) cost auditing, (Lawrence-1979) restrictions and rationing barriers, (Gray-1973) and information systems. (Johns-1979) Many studies conclude that physician behavior can be altered. (Schroeder-1973) (Martin- 1980) (Karas1980) Alteration in behavior may, however, not be sustained unless constant reinforcement is present. (Eisenberg-1977) (Nelson-1978) (Rhyne-1979) Efforts at constant reinforcement of physicians' behavior would undoubtedly have a cost and require considerable effort.

What would be a better, and a more constant reinforcement to altered physician behavior, than a patient who is cost conscious because it is his money that will pay for the tests? In Carel's book on medical cost containment he states that 50 years ago physicians worried considerably about medical costs because the patient was paying for it. (Carels -1980) If a physician was constantly reminded to be cost conscious by his patients asking some pertinent questions

concerning the expected benefits of the tests, what would happen? If the pressure to be cost conscious was being imposed by the patient, and not by the government or the third party insurer, the author has a strong feeling that it would be much more acceptable to the profession. Freyman talks about making the doctor to feel like the money that is spent by them is their money. (Freyman-1980) He, and others, have suggested that the doctors benefit by their decreased utilization on behalf of the patient. Kosowsky has suggested that the reimbursers and the hospitals might share in cost savings from increased efficiency of laboratory tests. (Kosowsky-1977) This implies that the doctor will be profiting by ordering less for his patient. To many physicians this is a conflict of interest that is very uncomfortable.

It is possible, that if when the doctor was ordering and doing less for his patient, he was also helping his patient to benefit in a financial way, this may be more acceptable to the physician. He would be required to balance his patient's medical needs and his patient's financial interests concurrently. This may cause the physician to be more accepting of limitations because they are imposed by the patient and the financial benefits of a limitation of service would accrue to the patient. As the rapid changes of the procompetitive forces are upon us we are witnessing the prompt entry of entrepreneurs to medical enterprises. If it is generally accepted that the insurance companies and entrepreneurs can make a profit from the delivery of less care, the author would find that a cause for concern. Even though the medical profession has not been as

efficient as would have been prudent in their response to the incentives of the past systems, his personal feeling is that if entrepreneurs and big business gain a substantial control of the medical care establishment, we will look to the past physicians as mere amateurs in manipulating the system to their own benefit.

Unnecessary surgery is mentioned as a cause of increasing medical costs and the reduction of such surgery as a means of cost containment. (Roos-1977) (Moore-1985) Moore estimates that approximately 30% of the total dollar flow for health care goes into the surgical stream. In dollars this amounts to 85-95 billion dollars per year. (Moore-1985)

Eliminating unnecessary surgery is not as simple as it sounds, for many reasons. To begin with it is very difficult to define "necessary." Pauly has written asking that very question. He states, "The problem, however, is not that the experts know what unnecessary surgery is and have been unable or unwilling to communicate it, but that medicine as a discipline cannot generate either the conceptual apparatus or the complete information set needed to arrive at a general definition." (Pauly-1979) He suggests that the missing ingredient is a fully informed patient. The definition of "necessary" will be defined by each patient confronted with a choice. The ultimate decision will depend on the effect of the procedure on the patient's well-being. Who is better able to judge than an informed patient who will be considering the many variables of cost, risk, and benefit? The cost will not only include economic ones, but the risks of complications and their attendant cost in life

and quality of life. The probability of the surgery accomplishing its goal must also be considered. In considering the economic costs, they should be considered from the perspective of what value would the money have to the patient if used to purchase other goods or services. The questioning by the public of the physician's authority, and their appropriate use of modern medical technology, is healthy. It is not entirely in the domain of the physicians to determine what is necessary and appropriate surgery.

As a reviewer of prior approval requests for Medicaid, the author has been caused to ponder the question of what is necessary surgery? How much do the patients really want the services offered them? Enthoven has asked a related question as to how much the poor should be forced to accept their share of society's assistance in the form of costly medical technology? (Enthoven-1978a) This issue is posed in scenario eight.

Much is expected of HMO's in reducing the amount of surgery. It is not entirely clear that they are capable of doing this. In an article by Luft, his data did not support the thesis that their savings are due to reduction in the amount of surgery. (Luft 1978c) It is often supposed that the lack of fee-for-service in a closed panel HMO would reduce the frequency of surgery. Something not given much comment in the literature search to this point is the influence of the surgeon's desire to do surgery, apart from any economic benefit to him. Surgeons may be attracted to a surgical specialty because they enjoy working with their hands. This can be generalized to all physicians as a desire to use the skills their training has given them. (Gorovitz-

1982) To distinguish from technical zeal or therapeutic purpose can be difficult for some physicians. (Crawshaw-1983) If the desire to utilize ones skills were a strong motivating force leading to the decision of the surgeon to operate, it would be unlikely to differ in a fee- for-service setting or a capitation system.

Hospital care: It is estimated that 47 % of the total health care dollar was spent on hospital care in 1984. In recognition of this fact the government has attempted to reduce the expenditure in that area by use of the DRG prospective payment to hospitals. This is really just another way of trying to do what peer review and decreasing length of stay was to accomplish. It is early yet and the total effect of this payment method is not yet clear. There are those who expect that it will not accomplish what the government wants. John Wennberg is of the opinion that we would most impact the cost of hospital care by concentrating on the admission to the hospital, instead of decreasing the length of stay or intensity of care after they are admitted. (Wennberg-1984a) He has documented the very significant variations in the rate of hospitalization of patients in different areas of the United States and in foreign countries. Aaron also has doubts that the DRG's will be a policy success. (Aaron-1984)

When the patient is admitted to the hospital for what may be considered legitimate reasons there is the decision of what level of care should the patient have? Here again the policies of third party payers and the hospitals have encouraged the use of higher levels of care than the clinical circumstances may warrant. If a physician, with a predisposition to be conservative with resources, were to

suggest to the patient that this level of care is not required and would incur unneeded expense, the patient's answer is usually, "My insurance will pay for it." Such an attitude is typified in scenario five. It is of interest that in spite of how jealously physicians guard their right to make clinical decisions without interference from outside forces, that it is not commonly observed for a physician to object to being told his patient has to be treated in the ICU. This is most likely because their reimbursment for care in the more intense settings is higher.

That patients with chest pain admitted to the hospital to "rule out" a myocardial infarction can be adequately cared for without increased mortality outside of the CCU has been demonstrated. (Thibault-1985) Treatment of acute myocardial infarction has been shown to be done at home, under some circumstances, with success. (Mitchell- 1982) (Adgey-1981) In the Choice-Card concept when the patients are aware of this, and a contribution from the discretionary fund may be required, it is expected that they would insist on some valid reasons why they should not be treated in a less expensive setting.

Terminal care: Anyone who has any contact with the medical care system will recognize that much effort and expense is devoted in the life support of terminal and hopeless cases. The first concern with this is that it causes pointless suffering for patients and their families. To compound that concern, it also expends significant resources that may have a preferred use by society, or a preferred use by the patient and the family. Why have we come to this dilemma that

has culminated in the courts with patients and families martialed against hospitals and doctors? Patients are now referred to as "prisoners in the ICU." (Annas-1984) The Choice-Card concept could help in minimizing this difficult medical-legal problem by involving the patient and the family more actively. That patients are concerned about these matters is evident in this statement of a nursing home resident:

> Please. When all vital signs show the end is near unless very drastic measures are taken, let us go. Prolonging a life for a person whose mind and body no longer function is an achievement for the physician, but do ask yourselves whether you are doing the patient any kindness. I hope that I won't be alive any longer than I can live. But I will not be doing the choosing when the time comes." (Armstrong-1985)

Obviously terminal events, such as referred to in scenario seven, would not be well reimbursed from the insurance portion in the Choice-Card plan and would require some choices made by the patient and family. The use of living wills may help in these circumstances. What is life, and is it different than living? Is it life the medical profession is dedicated to preserve, or is it meaningful living? If it is meaningful life that the profession is dedicated to preserve, who is in a better position than the patient to determine what is meaningful life?

Medical malpractice: Most discussions of rising medical costs include medical malpractice fears as a significant contributer. The cost of malpractice insurance to physicians of particular specialities is becoming prohibitive in some cases. In the state of Florida and New York malpractice insurance for obstetricians can cost in excess

of $75,000 per year. Obstetricians pay the most for malpractice insurance with 30% of them paying more than $30,000 per year. An estimate of $15.1 billion is added to the U.S. medical cost due to the malpractice threat. (George-1984) To others it is unclear how much of the rising costs of medical care is due to defensive medical practice. (Tancredi-1978) The cost of malpractice insurance ultimately comes from the patient via fees charged for professional services. In the face of increasing cost for malpractice insurance, physician fees increase. The malpractice threat also alters the manner in which a physician approaches patient care. A defensive posture is taken. An AMA survey has shown that in 1984 an overall 42% of physicians took at least one measure indicating an increase in the practice of defensive medicine. Thirty-one percent are maintaining more detailed records. Twenty percent are increasing tests or treatment procedures. Seventeen percent are increasing follow-up visits. Seventeen are spending more time with their patients.(AMA Center-1985)

It is felt by some that the threat of medical malpractice is used as a scapegoat to explain the increase of costs. (Somers-1977) It is also noted that West Germany, without the threat of malpractice, has had as much increase in the use of technology as the United States. (Rheinhardt-1976) Seven billion dollars was the overall amount estimated by Health, Education, Welfare Secretary Caspar Weinberger for defensive medicine. (Weinberger-1975)

As a backdrop for the medical malpractice problem, we find unrealistic public expectation and perception of what medical care

can or should do for people. The public generally does not perceive the significant uncertainty surrounding the practice of medicine. Results cannot be guaranteed. Many variables known, unknown and beyond anyone's control are operating in the human organism. In our current system of medical care financing, the physician is placed in the position of striving to reduce the amount of uncertainty, the patient has little economic incentive to curtail costs, the providers tend to profit by doing more, and an attorney is potentially looking over their shoulders. There is always one more diagnostic test that can be done, one more therapeutic modality to be tried. If the entire burden of decision, as to whether additional technology is employed, rests upon the physician we can expect that utilization, with its resultant impact on costs, will increase.

One of the integral and novel features of Choice-Card is the more active involvement of the patient with his physician in the medical decisions regarding him and family. The patients could share in the risk-taking decisions and have a financial incentive to minimize those diagnostic and therapeutic ventures most likely to be unproductive. This may, in reality, expose the patient to less risk. (Thibault-1985) As our technology increases it has greater potential for harm. If there was a reduced incentive to employ these modalities in those settings where they offer so little, patients could benefit by less exposure to risk and fewer economic burdens.

Kaplan, in a discussion of the usefulness of preoperative laboratory testing, points out that if preoperative testing were done only for indications and became the medical standard, no legal

liability should result from a complication attributable to an abnormality missed because testing was not indicated. (Kaplan-1985) It is argued that a more thorough clinical evaluation and more careful clinical judgment is required to make a decision not to use a test, than to order it. (Karas-1980) If the patient was aware of the reasoning that proceeded a decision to eliminate a test, and agreed to it in a setting where he would reduce his personal expenditure, this should decrease liability for the physician. A legal decision rendered by Judge Learned Hand stated this principle. A failure to take a precaution did not constitute negligence if the cost of the precaution exceeded the probability of loss without the precaution, multiplied by the value of the loss.

Fraud: A relatively new area of concern about the rising cost of medical care is shown in the area of medical fraud. This usually involves providers who make fraudulent claims for services not performed. Estimates of losses due to fraud range from 15 -45 billion dollars per year. (Goldsmith-1985) Blue Cross and Aetna are increasing their efforts to detect fraud. Thirty five states now have Medicaid fraud units. Employers are scrutinizing their employee insurance claim forms before submitting them to insurers. Other companies are rewarding employees who find errors in their medical bills before they are filed. The Aetna Company considers the policy holder as the best source for detecting incorrect forms. If this be the case, the Choice-Card approach to medical care financing could be a significant influence to reduce fraud. This plan would require the recipient to review each claim and to sign it as a verification that

services were given, and that he understood and agreed to the services. His motivation to do so would be that a portion of those charges are going to be paid from his discretionary fund, or in some cases by an advance of credit charged to the patient. The area where fraud seems to be so prevelant is in laboratory and diagnostic tests. In the Choice-Card approach these procedures are the very ones that would be most heavily paid from the patient's discretionary fund, and would therefore be the ones to receive closest scrutiny by patients.

Preventive care and behaviorly related disease. Care of behaviorly related diseases would be less generously covered by insurance in the Choice-Card concept. If there was a free choice between various medical insurance plans it would be possible that a self-selection process would occur. Those who realized their significantly reduced risk of disease, by avoiding alcohol and tobacco, may be attracted to Choice-Card by its incentives. Those who realized that they were at risk of tobacco and alcohol related disease, and also at economic risk with Choice-Card, may select the more traditional type of insurance. This would, in effect, place the risk sharing among those individuals of similar risks. As those at risk for alcohol or tobacco related disease tended to concentrate with the more traditional insurance, the premiums would also rise. The resultant cost rise would serve to give incentive to those non-users of alcohol and tobacco still in the traditional plans to look more seriously at alternate plans, such as Choice-Card. At its inception there would be a commitment to a given amount of money for an employee's medical care. This amount would be equivalent to the cost of an HMO premium

or a good policy in a traditional plan. An employer would contribute the same amount to the Choice-Card enrollees as he would for any other plan. If those participating in Choice-Card by selective use of their resources in response to the built in incentives for economy reduced the cost of the insurance portion, the amount saved would go to the discretionary fund, and not be reverted to the employer, insurance company, or provider. It is possible that patients who use alcohol or tobacco, in response to these incentives, may be pursuaded to alter their behavior and become non-users. Even if they did not change their behavior, Choice-Card could be a method through the use of incentives and market forces, to place the cost of behaviorly related medical care on those who are at risk of those diseases.

Administrative waste. This is an area of considerable expenditure in the United States health care system but one that does not receive much attention as a contributor to rising health care costs. Between the years 1970 and 1982 the number of health care administrators increased by 171%. In the same period of time the number of physicians increased by 48% . The total number of health care personnel rose by 57%. (Statistical-1984) Any physician whose practice has spanned the years of rapid medical cost inflation can attest to the significant increase in his administrative costs. Himmelstein and Woolhandler have estimated that the total cost of health care administration in the United States for 1983 was 22% of all spending for health care. (Himmelstein-1986) That would amount to 77.7 billion dollars. Of this cost, 15.6 billion dollars is for the administration of the private health insurance programs, Medicare,

and Medicaid. (Gibson-1983) Most of the efforts which have been introduced in the United States to control cost have required the use of more administrative personnel to insure that a reduced amount is spent on the care of people. This is because the system does not have any inherent forces to minimize costs. The author once read that a system was needed that would encourage physicians to virtue and not to delinquency. (Cherkosky-1968) Because of the basic defects in our system there is increasing tendency to monitor and to police, thereby increasing the administrative cost.

The apparent excessive administrative costs of our system are cited by Himmelstein as an argument for a national health system such as Britain or Canada. They have significantly less administrative costs than in the United States. In Canada the cost of administration of the national health insurance and hospital administration is only 6% of the total health care resources. A similar figure is noted in the nationalized Health Service of Britain.

Choice-Card could have a favorable impact to reduce administrative costs. The anticipated reduction would be partly in the form of reduced collection costs for providers. The providers would be paid by the insurance carrier for the entire cost of a service. The collection of the patient's share would be done by the intermediary. Because of the ability of the intermediary to obtain the patient share from the patient's discretionary fund, a good portion of the collection would be part of the insurance transaction. The collection of that patient obligation that is a cash advance would be much easier because of the potential for patient's loss of insurance

benefits in the event of their defaulting on the obligation. The cash advance could also be collected from the future contributions that come into the discretionary fund. If this method of collection were elected, the transaction would occur automatically as each monthly health care payment comes from the employer.

In the case of the primary care physician, who would be paid on a capitation basis, the need for accounting, collection and billing would be significantly decreased. In England the physician's office overhead is 29%, (Maynard-1975) as compared to an overhead in the range of 50% in the U.S. Since an important responsibility of the primary care physician would be patient education, some of the resources saved in the collection and billing could be directed to the accomplishment of that goal. As the patients were trained in the techniques of being an intelligent consumer of health care they would be able, and probably willing, to assume some administrative tasks such as careful perusal of the medical claims for appropriateness and accuracy, thus reducing the need for policing activities.

HEALTH POLICY AGENDA FOR THE AMERICAN PEOPLE

Another method of scrutinizing Choice-Card is to examine it in the light of the principles set forth in the Health Policy Agenda for the American People. As an explanation of this "agenda," the following is quoted from the introduction to the interim report, February 1984.

> In 1982 the American Medical Association initiated a project to guide health policy development. The project--A Health Policy Agenda for the American People(HPA) -- is a public effort to develop a long-term, consistent approach to health care issues facing the nation. It is hoped that the HPA will provide a common basis for initiating programs and for responding to social, economic, scientific, educational, and political circumstances as they evolve. The HPA provides an opportunity for a wide variety of people and organizations to examine the foundations and purposes of the American health care system and to develop an agenda based on common concerns and common understandings. This interim report reflects the collaborative efforts of over 350 individuals and approximately 150 organizations who have been involved in the process. Participants on six Work Groups have developed principles to guide policy development. Principles are broad value statements of what should or ought to exist in a policy arena. They are statements of the most desirable circumstances or situations and should help to guide individuals and organizations as they make their decisions.

As mentioned in the introduction to HPA there were six work groups:

Work Group One was concerned with medical science and its premature application. There is acknowledgment that new medical and surgical procedures have not been subjected to critical scrutiny. Choice-Card would require this as the basis for being included as a benefit of the insurance portion.

Work Group Two, dealing with education of health care professionals, states that their education should include instruction in cost-effective health care. If the role of the primary care physician were expanded to include that of being a financial manager of his patient's health care resources this would give significant impetus for including this type of training. It would do little good to educate physicians in the delivery of cost-effective medicine and to have them practice in an environment that does not encourage it, for both patient and physician. Choice-Card would support this principle by providing remuneration and incentive for physicians to practice in that manner, and to so instruct their patients who would also have incentives to be cost-conscious.

Work Group Three addressed health resources, and its report states that technology should be used in the care of patients solely to achieve potentially meaningful benefit in health or quality of life. Choice-Card would support this principle by reimbursing poorly in those situations where expenditure of resources prolongs suffering rather than influencing health or quality of life.

Work Group Four dealt with delivery mechanisms. Among the stated principles is that individuals have a right, and a responsibility, to participate knowledgeably in the planning and implementation of their own health care. Free choice of appropriate health care providers is recommended. They suggest that health care providers should play a major role in the provision and preparation of educational information for their patients. HPA also states that individuals have a responsibility, and should be given incentives, to

act on the information about healthy lifestyles for themselves and their families. Choice-Card will promote the achievement of each of these principles and will use one of the strongest motivators for the patient, financial motivation. When resources are finite, it is stated that there should be a decision mechanism to determine what limitations should be imposed on the scope and intensity of services that are to be provided. It is acknowledged that there would be difficult decisions in this area, that would have ethical implications. Choice-Card would approach the fulfillment of these principles by setting a monetary limit available, structuring the insurance reimbursement in a manner to encourage cost-effective utilization, and allowing a maximum expression of individual discretion in response to the unique aspects of their circumstances and their own personal preferences. By allowing maximum individual choice and expression within that framework, we might be able to avoid the necessity of making some of these painful choices as a society by codifying government edicts.

Work Group Five addressed evaluation, assessment, and control. With economic resources being limited, HPA states 3 basic factors should be used in determining allocation. 1) That the well being of people be promoted. 2) People's value choices and preferences be respected. 3) People be treated equitably. It is expressed that professionals should adhere to a code which assures that health care decisions are not made for the purpose of personal or institutional gain. This foregoing statement seems to call into question the basic concept of fee-for-service medicine and the current operation of

some of the HMO's. When a provider is benefited according to the amount of service given, there is always a temptation to act for one's personal benefit rather than the patients. It is felt that in an HMO setting, incentives to reduce overutilization would be present. In an attempt to give incentive for reduced utilization some HMO's are rewarding physicians with the money that the doctors do not spend on their patients for diagnostic studies and hospitalization. This practice would seem to especially challenge this principle of the HPA, related to medical decisions being made without personal or institutional gain. Choice-Card would, in effect, give a series of checks and balances on the system. It could preserve a segment of the medical practice to the incentives of fee-for-service, such as, personal gain that can be a source of innovation, increased productivity , and efficiency. Also, in the same system there would be a segment of the providers who are rewarded not by the amount of service given, but by the quality of service given, as judged by the provision of primary medical services and on counsel as to the wise expenditure of the resources allocated to his patient for medical care.

Work Group Six developed the thought on payment for service. This aspect of HPA will be discussed in greater detail because it is in this area that is the basic thrust of this paper. The introduction makes note that the patients and the providers no longer interact to determine the cost of the service. It was felt by many of the participants that lack of price competition is a root cause of rapidly escalating costs. This work group developed the following principles which they felt should be guiding policy in this area.

1) The financing and delivery of health care should evolve through a process such that:

a) a pluralistic system is assured;

COMMENT:

Choice-Card could easily exist in our current pro-competitive environment along with the traditional insurance, prepaid systems such as HMO's, or with a voucher system and increase the pluralistic nature of the healthcare system.

b) price is determined through an interaction between individual recipients of care or their agents;

COMMENT:

Choice-Card would provide for a maximum of interaction of patient and provider in the determining of price. A fee is set for the insurance payment of various procedures but that fee may be significantly different from the usual insurance payment. The physician is not obliged to accept the insurance payment as the complete payment, but must seek that agreement with the patient. Also acting as the patient's agent in the setting of price is his primary care physician. The insurer could still continue to act as an agent for the patients as in a PPO by identifying and informing the patients of those providers who will agree to the provision of services at a given price.

c) benefits for reimbursement of health care services are determined through the interaction of purchasers, payors, and

their beneficiaries;

COMMENT:

With Choice-Card the beneficiary could choose insurance coverage to meet his individual preferences. "Cafeteria style" of selecting benefits is an approach used by larger employers but more recently is being offered by smaller employers. (Galante-1986) This choice would include the type of providers that the patient will use. To maximize patients' choices and cost awareness, the consumer should make choices at the time he purchases his medical insurance. These choices should be: What kind of health care providers do I want to use? What kind of risks do I want to be protected from? What kind of services do I want to have? When an insurance plan is mandated by law to cover all licensed providers the effect is to increase the premiums. Moral hazard effect is such that if a person who normally would not use the services of a chiropracter has this included by law, as a benefit, and he has a back pain that is slow to go away (as they often are), he may avail himself of the free, or at least highly subsidized, service. If he were required to pay for this service himself, he would not be as likely to use it. An example of increased utilization of services, when introduced as an insurance benefit, is noted from the experience of the United Auto Workers in Detroit. Podiatry coverage was introduced and in the first year the cost was 8 million dollars, the second year cost 40 million dollars. The third year cost rose rapidly to 90

million dollars.(Goldfarb-1983)

This study did not take into account the decrease in expenditures going to other providers who may have previously been delivering some of these services. Even within the medical profession one should be free to choose what specialty service he may use. Many people have an aversion to, and will not, use the services of a psychiatrist. Why should they then be required to have protection to pay for a service that they will not use? This concept would also provide for patients to choose some specific conditions for which they would or would not like protection, based on their lack of need for coverage. If one does not use alcoholic drinks, he is not at risk of alcoholism. If he is not a smoker, he is at negligible risk of emphysema. If a women has had a hysterectomy she will not have need for obstetrical coverage. This concept would introduce, and perhaps redefine, the concept of insurance. One of the basic definitions of insurance is that you are grouping together people with similar risks. Some consumers have an aversion to specific modalities of treatment, such as chemotherapy, and have no intention to ever use them. Should they not be able to purchase a health policy tailored to exclude a specific service they do not intend to use? Once a person has selected a medical plan that is designed to cover his needs, that policy should be structured to give the consumer some incentive to be cost conscious at the point of service, as well as at the time of health care insurance purchase. Choice-Card would do this. It may be argued that one

cannot anticipate what may be their needs in the future. They may indeed feel inclined to use a psychiatrist in the future, and in these circumstances could utilize their discretionary fund for this purpose. It should be emphasized again that if a person elected insurance coverage with a smaller premium, this would leave a larger amount to be placed in the discretionary fund.

d) individuals have the responsibility to provide payment or to cooperate in another payment mechanism for the care they receive;

COMMENT:

In the Choice-Card system a patient's acceptance of a service and his signature of acknowledgement will provide payment in full for the provider. Even if a portion of the payment must come from personal funds, the recipient has obligated himself to the health care financing organization, and not to the provider.

e) society should pay for needed health services for those without the resources to pay;

COMMENT:

Choice-Card could be available to the citizens who are unable to pay by the use of a government voucher, such as they are now using for buying prepaid medical care with HMO'S. It could also form the basis for an optional method of financing medical care in a national health insurance, an option that may be more acceptable to organized medicine.

f) regulation is sufficient to assure fair competition and access

to health care services;

COMMENT:

The Choice-Card would use internal regulation in the system that will more nearly implement the market forces, and minimize the need for external or government regulation. The confrontations and the differences will be handled by the patient with his primary care physician acting as advocate for the patient. The patient would have an agent as he interacts with the specialty physicians that are invited to participate in his care

2) A market process should determine the balance between expenditures on health care (aggregate and per capita) and those for other goods and services.

COMMENT:

Choice-Card would maximize market forces in a manner not present in any plan with which the author's reading of current literature can familiarize us. A limit in total expenditure is set by a voucher. This voucher amount would be the maximum amount that an employer would make available for any other type of health insurance plan. The resources designated for health care, if conserved wisely, could be made available to the patient for other consumer items and therefore introduce competitive forces for the money allotted for health care, as well as competitive forces between health care providers, when the money is spent in the medical care sector. A system of financing for

medical purchases in excess of the voucher amount is included as a function of Choice-Card. This system could give us very vital information as to how much the citizens value medical care. If with this system, those involved were found to spend less than the voucher amount on medical care, or if they spent more than voucher amount by using the credit feature, this would help the nation to know at what level to set the voucher amount for those who may be participating in other systems, such as prepaid HMO'S.

3)Payment systems should encourage the cost-effective use of and delivery of health services while maintaining high quality care.

COMMENT:

Choice-Card would identify those procedures which are shown through good scientific study to be effective. Payment by insurance for such procedures would be generous, as compared to those which have not been so proven. If cost containment will require some reduction in quantity of service the area of reduced service should be in those areas not demonstrated to affect quality. Choice-Card would give incentive for this.

4) Government spending and taxing policies should encourage efficient production and consumption of health services.

COMMENT:

This principle has largely been ignored in the past government policies. As a result of the demonstrated need for some control, the government is looking to a voucher

system for the future. Choice-card would work very nicely in such a government plan. The speculated cap on the amount of medical insurance premium allowed to be tax-exempt would work in favor of the Choice-Card concept.

5) Payment systems and benefit design should encourage the use of preventive services and the promotion of health.

COMMENT:

The design of Choice-Card would not provide good reimbursement for behaviorly related disease, such as emphysema and alcoholism. Participants who choose to use products known to be injurious to health would understand that the discretionary fund and personal resources would be required to cover such problems. This would possibly act as an incentive for behavioral change. If they were not encouraged to relinquish such habits they may elect to obtain their health coverage in a more traditional setting or an HMO. Those who realized their significantly reduced risk of disease by avoiding alcohol and tobacco, may be attracted to Choice-Card. This would in effect place the risk sharing among those individuals of similar risks. As those at risk for alcohol and tobbaco related disease tended to concentrate with the more traditional insurance the premiums would also rise. The resultant rise in premiums would serve to give incentive for those non-users of alcohol and tobacco, still in the traditional plans, to look more seriously at alternate plans, such as Choice-Card. Thus Choice-Card could

be a possible way through the use ofincentives and market forces to place the cost of behaviorly related disease on those who are at risk for those diseases.

6) New and existing health care technologies should be evaluated for safety efficacy and economic impact to be eligible for payment system coverage.

COMMENT:

At the inception of this concept both existing and future technologies would be evaluated for re-imbursement purposes. In the presently established plans with precedent already set, their projected course seems more likely to include only the newly introduced technologies.

7) Payment systems and benefit design should offer some options which allow individual choice of provider and of delivery mode.

COMMENT:

This concept would allow a maximum of individual choice in terms of individual provider, type of coverage, type of provider, and setting for care.

8) Benefit design and payment systems encourage continuity of care.

COMMENT:

Continuity of care is becoming a particular problem in the case of some employees whose employers require that they participate in an HMO. The particular HMO may change from year to year, as their contract may be underbid by another provider. Choice-Card is designed as a lifetime system that

is portable from one employer to another, thus allowing them to maintain the same physician, regardless of employer. This would be conditional on the employer offering the plan. If it had market appeal to patients it should be acceptable to employers, because it allows them to be committed to a given amount and not the open-ended provisions of the past. One of the most serious defects of our current system of financing medical care is the strong link between employment and insurance coverage. Health insurance coverage should be continuous. (Enthoven -1978a) It is particularly disheartening for a person, or family, to have medical insurance available for years and be essentially unused while employed; and then, in a brief period of unemployment, without medical insurance coverage, have a significant medical problem. Many studies would show that an individual at time of the stress of unemployment is most vulnerable to illness (Fleming-1984) (Rahe-1974) Choice-Card could be of great help in alleviating this problem. As an example: a man had been employed and covered under the Choice-Card plan for fifteen years. In his discretionary fund he had accumulated $2500. This money would be his when leaving his former employer, but still accessible for only medical needs. At this point of unemployment he would be able to unbundle the Choice-Card package and purchase only the skeleton basic insurance protection. He could then use his money in the discretionary

fund to pay his premiums and not be vulnerable to the potentially huge bills of crucial medical care. The average unemployed person remains so for only 2.9 months. (OEDC-1982) In the example we are now considering, after only 3 months of unemployment, he would not deplete his discretionary fund and upon his re-employment could again participate in the full package of Choice-Card. If his period of unemployment was extended, and the discretionary fund depleted, perhaps at this point he could be extended credit to purchase the basic insurance coverage. Another possibility would be to involve the government at this level and have them insure the loans for insurance premium payment. A direct payment by the government of the premium would also be possible.

9) Payment systems for the care of the terminally ill should emphasize concern for the quality of life.

COMMENT:

A particular aspect of Choice-Card, unique to it, is the payment from the insurance fund for terminal illness to be based on probability of obtaining useful result in terms of quality human life. This would discourage the expenditures of scarce resources to prolong dying, rather to reclaim meaningful life.

10) Payment systems and benefit design should offer options for long term care and should provide incentives for the most appropriate setting and level of care.

COMMENT:

Choice-Card has not addressed to this point the provision of long term care, but is not unique from other insurance plans in this deficiency. It would be possible, though, that individuals who were conservative in their use of medical services could arrive at older age with a considerable amount of money in the discretionary fund with which they could purchase long term care. It is also possible to consider the linkage of money in the discretionary fund with long term care insurance. This is discussed later in the section dealing with implementation. Long term care payment has fallen largely to the public sector and insurance for this setting of care has not been available. Private insurance is being considered as a means of reducing the financial demands on public budgets. (Meiners-1982) (Tresnowski-1985) (Hospitals-1985) A significant deterrent to private long term insurance has been lack of information upon which to base cost projections. (Meiners-1984) Meiners has established some premium estimates for prototype policies and availablility of such coverage may be forthcoming. There is always concern for the moral hazard of insurance but this should be less in the coverage of long term care than in the acute care where drama and symbolism are much more prevalent. It is difficult to envision promoters successfully appealing to patients by making a nursing home seem

attractive.

11) Payment systems should help support health professions education and some forms of research.

COMMENT:

Choice card could support a type of epidemiological research that would be available in no other way. We would have a population of individuals who may elect to abstain from some forms of medical therapy accepted as standard care by the rather authoritarian medical establishment, but which have not been subjected to the careful scrutiny of controlled trials. Such trials would have a difficult time to gain acceptance when the entire burden of decision rests upon the physicians. With the primary care physician being reimbursed on a capitation basis, one of his responsibilities would be to accumulate accurate epidemiological data on his patients. These data could be very informative and benefit all of society. Bayer has indicated the need for such prospective studies. (Bayer-1983) The possibilities for the use of these data when stored in computer data banks is just emerging. It is highly probable that it could contribute to a patient data base for predicting individual patient prognosis.

SETTING FOR A TRIAL

This concept is conceived in such a way as to be introduced in the procompetitive environment now existing in our society. It would require minimal interaction with government, only the IRS, to implement. The involvement of the IRS would be needed only to allow the money in the patient discretionary fund to be regarded as nontaxable until such time as it is withdrawn for expenditure for purposes other than medical care. If the IRS were not to rule this way, congressional action would be required.

Possibly an ideal place for this to be first tested is in a large corporation that is self insured. In this setting, the provisions of ERISA would exempt the insurance portion of the plan from the mandated provision of the state insurance codes. This would allow a patient to choose coverage for the type of providers that he will plan to use.

It is likely that no employer would want to develop this concept, or may lack the expertise to do so. It would be a very logical role for a large benefits or insurance company to develop this, and market it, as a choice for employers to offer their employees. It is currently required by law that employers of a certain size offer an HMO option, if one is operating in their area. If Choice-Card were tried, and shown to be successful in providing access to essential care at a reasonable cost, there may be action to also require this plan as an

option. If, however, it had appeal in the market place to employers and employees it would require no legislative action.

Assuming this plan was accepted and demonstrated to be effective for a significant segment of the population, would it have application for Medicare patients? Enthoven has introduced a consumer choice health plan.(Enthoven - 1978a) He points out the open ended nature of the government's obligation for medical care and its inability to control costs. His proposal is essentially a voucher system by the government with the patient choosing between various options; usual insurance, HMO, PPO, etc. If they chose a plan with a cost less than the voucher amount, the surplus could be theirs immediately. Choice-card could easily be an option along with the other plans. Enthoven envisions his idea of consumer choice as a basis for National Health Insurance. The choice that he would allow consumers would be to select among various plans. Choice-Card could be one of those options and would allow even further choices for the patient who was desirous of significant input into his health care.

Physicians would be more likely to accept a National Health Insurance involving Choice-Card because it would allow private practice, fee-for-service, reduce the pressures for group and corporate practice, and put the pressure for fiscal restraint between the patient and the physician, and not dictated by the government or insurance carrier. Enthoven's plan would require that there be a cap on government expenditure set by the amount of the voucher. In an address to the Utah State Medical Association in Salt Lake City on September 26,1985, Mr. McClain Haddow, Acting Assistant Director of

Health Care Financing, stated that the federal government is moving to the use of a voucher system in the financing of Medicare.

As this concept developed the author had originally thought that Medicaid patients would not be likely ones to participate in this type of health care financing and delivery system. At this point he is not so convinced of that. With the help of a primary care physician, well trained in cost effective medical care, Medicaid patients may, in reality, be some of the most motivated people to watch carefully their expenditures on medical care, when given the alternative use of those resources for other consumer items. Presently there is a concerted effort to enroll Medicaid patients in prepaid HMO'S . There is one interesting recent report concerning health outcome in an HMO setting. This is from the continuing study by the Rand corporation of HMO's compared to traditional fee-for-service with varying degrees of patient cost sharing. The most recent report looked at health outcome.(Ware-1986) The suggestion is, that low income, high health risk patients have a poorer health outcome in an HMO setting than do higher income people. It is of interest that the low income people did well from a health outcome standpoint when in a cost sharing situation. If this finding were consistent, it could be an indication that a system like Choice-Card would have applicability to the Medicaid population.

IMPLEMENTATION

To this point the discussion has been on a theoretical basis. Attention will now be turned to the practical aspects of implementing this concept. Admittedly, there are some formidable problems and challenges. The author does not personally have the expertise to know how this would best be done. Input from many disciplines will be necessary. The strengths of this concept lie in the incentives given the patient and the provider and the provision of maximum choice for patient. This is an idea and concept born out of the concerns created in a practitioner of medicine as he observed the physicians and patients responding to the incentives of the past system and the significant changes of recent years. Perhaps some will feel this is not a practical approach. To others perhaps this writing will stimulate thinking toward more significant involvement of patients as we seek a solution to the cost of medical care. Patients may have something to contribute, but in a different way than proposed herein. If efforts in this direction are not considered and tried it may never be known what role a knowledgeable and involved patient can play in our efforts to maximize the value of health care expenditures.

There is much epidemiological research available and much will be forthcoming to help us in making cost-effective decisions. We are, however, lacking a system of incentives for both patient and

providers to act on this information as it applies to the individual patient. If agreement could be reached that the objectives and the incentives of Choice-Card are desirable and appropriate; it is hoped a commitment of the expertise and resources could be made available to proceed to implementation and trial. There would be problems, and mistakes would undoubtedly be made. These should be looked upon as a means by which refinement of a basically sound concept could be accomplished. The cost of developing a more reasonable approach to fees paid by insurance could be significant. However, that cost should not be attributed only to the development of the Choice-Card concept. This is something that is needed for the entire health care system and is being pursued by other investigators. What may be learned and observed in the development of Choice-Card could, and should, have application elsewhere.

Assuming that a commitment of a given amount of money (voucher) is given for each patient when a trial was ready, the first step to take would be the development of a benefit and fee schedule for the insurance portion. Because of the evidence of much inappropriate utilization of diagnostic studies and the perverse incentives given to providers, diagnostic procedures would not be a benefit of the insurance fund. This would make it unnecessary to develop a fee schedule for all of the procedure codes in the laboratory and radiology areas. However, it would be helpful for the patients to have some information as to what may be a more realistic price for some of these procedures. Some diagnostic procedures are very expensive, such as coronary angiogram and magnetic resonance

imaging. For these, some insurance participation would be appropriate using both a patient deductible and cost sharing to continue cost consciousness on the part of patient and provider. For those patients who may have chronic diseases and may require increased and prolonged usage of laboratory tests, greater participation on the part of insurance should be allowed. This would then give incentive to improperly use the diagnostic codes associated with the more generous laboratory reimbursement.

There are certain diseases where it is very clear that we can reduce future health problems and expenditures by diligent medical followup and aggressive treatment. For these types of problems an insurance program should be very generous in paying for the frequent outpatient visits and the cost of medications. As an example of these, I would give hypertension and diabetes. When submitting a claim for services, in the Choice-Card concept, the payment would be based not only on what was done, but the clinical diagnosis as well. With the diagnostic code and the procedural code used to arrive at a payment by the insurance company, there is a risk of manipulation of the diagnostic codes by physicians. Many of the diseases that would be noted as more reimbursable would be those such as diabetes, hypertension, and some cancers. These diagnoses also have an adverse effect on patient's insurability for life insurance. If this information of medical importance were available to the life insurance companies, and such knowledge could lead to unfavorable life insurance consequences for the patient, such information may minimize the incidence of improper reporting of diagnoses for

medical care reimbursement purposes. The combining of medical, life and disability insurance into one package with the same company would provide some checks and balances to the diagnosis manipulation. The use of the primary care physician as a provider of care on a captitation basis, rather than fee-for-service, may tend to reduce the tendency for diagnosis manipulation. It would be possible to increase the capitation fee for care of a patient when a diagnosis of diabetes or hypertension is made.

Physician fees will have to be individually determined. This could be done by going through the CPT prepared by the AMA and a fee given to each code number. The question of who will determine this, and in what way, is a logical one. Many options for physician payment are under study (CBO-1986). The first step I would propose would be based on resource costs. Some interesting work along this line has been done by Stason . An example of what his evaluation has shown is in the CBO study. Coronary artery by pass surgery would be $1200 for surgeon fee compared to $3000 as an average allowed amount by Medicare. For pacemaker implantation $1060 is the average allowed amount, but $256 would be the cost based amount. Cataract surgery would be $150 based on resources cost, whereas $1100 is the average amount allowed by Medicare.

Another factor to be considered in arriving at the surgical fee would be epidemiologic evidence of small area variation in frequency of the procedure. Research done by Doctor John Wennberg and others could form the basis for these determinations.

Cosmetic implication of a procedure would also be considered in

determination of a fee schedule. Cosmetic procedures are often highly sought after especially when highly subsidized by insurance. That these procedures are of a lessor priority is generally conceded. It was in this area that insurers were first to decrease benefits when the cost concerns emerged. It is for this reason that it is suggested as one of the factors to be considered in establishing a fee from the insurance portion. Consensus of the demonstrated effectiveness in achieving the intended goals of the procedure as determined from epidemiological studies and also from physician survey would form the basis for this determination.

In making the final determination of a fee a panel of physicians from various specialties and general physicians would be used to determine the categories appropriate for each procedure. It is not a contention that this would be a perfect system or that the determined fees could not be disputed. It is contended, however, that it would represent an improvement over the current system where the fees are set by historical accident, precedent, and political influence. This would attempt to set some priority in a systematic way. The fee paid by the insurance portion is not a binding one on the providers, but must be agreed upon by he and the patient. The chart grid (Table 1) is an example of how the various factors could be integrated to arrive at a fee.

The capitation fee for the primary physician also would need to be determined. This would be funded from the insurance portion.

Table 1

A POSSIBLE APPROACH TO DETERMINING FEES PAID TO PHYSICIANS BY THE INSURANCE FUND

PROCEDURE	RESOURCE COST BASED FEE	EVIDENCE FOR SMALL AREA VARIATION				DEFICIT OF EVIDENCE FOR EFFICACY				COSMETIC IMPLICATIONS				FEE PAID
		0	+	+ +	+ + +	0	+	+ +	+ + +	0	+	+ +	+ + +	
CATARACT REMOVAL	$150*				X	X				X				$105
CORONARY BY-PASS LEFT MAIN	$1200*		X				X			X				$840
CORONARY BY-PASS 3 VESSEL	$1200**			X				X		X				$720
CORONARY BY-PASS 2 VESSEL	$1100**				X				X	X				$440
CORONARY BY-PASS 1 VESSEL	$1000**				X				X	X				$400
PACEMAKER INSERTION	$256*				X	X				X				$205
SEPTO-RHINOPLASTY	$500**				X		X						X	

FOR EACH (+) IN THE PRECEDING EVALUATION GRID A CERTAIN PERCENTAGE COULD BE SUBTRACTED FROM THE RESOURCE COST- BASED FEE. IN THE ILLUSTRATION A 10% REDUCTION IS USED. IN THIS EXAMPLE EACH CATEGORY IS WEIGHTED UNIFORMLY, BUT IT WOULD BE POSSIBLE TO ASSIGN DIFFERENT WEIGHTS TO EACH.

* FROM STASON: PHYSICIAN REIMBURSEMENT UNDER MEDICARE
CONGRESSIONAL BUDGET OFFICE 1986

** AUTHOR'S ESTIMATE

Several factors should be considered such as age, health status, sex of the patients. The HMO's would have access to helpful information on capitation but their figures are more frequently in reference to total health care capitation, whereas, this concept involves a partial capitation. Some HMO's are using this form of partial capitation. (Anderson-1986) This is not a frequently mentioned concept in the literature. Health Insuring organizations contracting with Medicaid in Santa Barbara County and in Louisville are using this concept of partial capitation. (Neuschler-1985)

In order to arrive at a capitation fee, the scope of services would need to be defined. Perhaps some basic and simple laboratory tests, such as urinalysis, CBC, pregnancy tests, and strep screens could be included in the capitation scope of benefits. This would assure that these most frequently used studies were available for patient convenience and because these are some of the more frequently performed tests may tend to reduce administrative costs of billing individually for these procedures. Because a primary care physician might be an internist, and many family physicians are not now doing deliveries, it would not include obstetrical care in the capitation scope of benefits. If a family physician desired to do the deliveries, he could charge on a fee-for service basis. Responsibilities of the primary physician for inpatient care would need to be defined.

Because of capitation there may be incentives to refer inpatients to specialists. There would be, however, an economic incentive for the patient to have the primary physician provide inpatient care. The primary physician would have incentives and pressures that are

counterbalancing. Physicians have incentive to use the skills of their training, and by this incentive would tend to retain care of the patient. Primary physician reimbursement would, however, reduce the economic incentives to maintain the patient care beyond his capabilities. Even if the leadership role of inpatient care was transferred to a consultant there would be an expectation by patient and the insurance organization that the primary care physician remain actively involved. This would allow him to monitor the care in terms of cost effectiveness and be involved in assisting the patient in his medical care decisions. Since the primary physician income is not based solely on a fee-for-service he would not have the economic pressures to abandon the hospital patient to the total care of the consultants.

With primary care available to the patients without charge, a potential for abuse would exist. Several ways could be used to avoid this if it became a problem. Possible methods would be, a co-payment per visit, institution of a co-payment after a given number of visits per month, institute a full charge for excess visits. Such "unnecessary" visits could be an occasion to involve the patient in some education on utilization. These details would need to be clearly defined in the contract.

Educational benefits and requirements would need to be defined. These would be general educational efforts and specific disease oriented educational endeavors. With both patient and physician given incentives to be cost conscious, educational activities aimed at effective prevention would be given a high priority.

Audio and video facilities may be required for patient use. Perhaps there should be some requirement for patient participation in selected educational subjects. Areas of special emphasis would be drug abuse (alcohol, tobacco and street drugs), sexually transmitted disease and sexual behavior and its implications for health . Some subjects and topics may be dealt with by group discussion allowing patient interaction.

Hospital payment would be by DRG (case based). Included as a factor in fee determination would be consideration for small area variation of admission frequency for that diagnostic code. A severity of illness factor, and a factor indicating the likelihood of the illness being behaviorly related, would also be included. Table 2 is an illustration that may be helpful in understanding how this would be done.

If the currently used DRG payments were used, which are based on past charges, it would tend to propagate the inequities of the past. It would be preferable if resource cost based DRG payments were available, but these are not presently obtainable. The percentages of payment added or subtracted by the various considered factors are arbitrarily selected. This could be changed as new information became available, which would indicate the wisdom of a change. In the above example, a 10% amount is subtracted from the DRG payment for each (+). An exception to this is in the severity of illness category . The number three level is considered the average and a 10% amount is added for each (+) above and 10% is subtracted for each (+)

Table 2

A POSSIBLE APPROACH TO DETERMINING AMOUNT PAID TO THE HOSPITAL BY THE INSURANCE FUND

DIAGNOSTIC GROUP	DRG PAYMENT	EVIDENCE FOR SMALL AREA VARIATION				SEVERITY OF ILLNESS					DEFICIT OF EVIDENCE OF EFFICACY				FEE PAID
						1	2	3	4	5					
		0	+	++	+++	+	++	+++	++ ++	++ ++ +	0	+	++	+++	
MAIN CORONARY BY-PASS	$16150		X							X		X			$16150
CIRRHOSIS-ALCOHOLIC HEPATITIS	$4040			X				X					X		$2424
CHRONIC OBSTRUCTIVE PULMONARY DISEASE	$8050				X	X							X		$2415
CORONARY BY-PASS 2 VESSEL	$16150				X	X							X		$4845
APPENDICITIS	$3175	X						X			X				$3075

below that level. Work on the severity of illness and DRG variance has been reported by Brewster. (Brewster-1984) Other categories could also be added as deemed appropriate. One such category that may be considered could be called relevance. How relevant is a medical degree to the performance of upper G.I. endoscopy? How relevant is a medical degree to the performance of cataract surgery? Is it possible that a person very dexterous could be trained to do some of these specific tasks without the necessity of complete medical training? Certainly these should be done by a fully trained specialist, but how critical is the complete medical training to the actual performance? This is not advocating that these procedures be done by someone other than a medical doctor. Only that we recognize that some of the procedures which fall in the province of a certain specialty are in reality technical maneuvers, perhaps not requiring a medical degree. The medical training is necessary in the appropriate evaluation of the indications for the procedure,and the evaluation of the disease in the context of the individual involved. The systems of the past have tended to overvalue procedures and depreciate the cognitive skills and judgement that only medical training can provide.

When the basic research was done to assign a fee to each CPT code and DRG category, an approach to an insurance company could be made. The fixed fee should make the actuarial task easier as compared to the open-ended system now used. When given the proposed number of people insured and the fixed fee of insurance

obligation, the per capita cost of insurance could be projected. When this was available, by subtracting the insurance cost from the annual voucher amount, the amount available for patient discretionary funds could be obtained.

The insurance contract would provide that excess profits would revert to the patient discretionary funds. This would be essential because if utilization was significantly decreased a windfall profit for the insurance company could be seen. It would be expected that the original insurance bid would be based on the industries past utilization rates. The insurance company would be at risk and no assessment of the discretionary funds would be possible. It would be essential that this insurance fund be completely separate from any other indemnity insurance provided by the company.

The question of reinsurance must be addressed. An inclination is present to prohibit such. However, one of the basic premises of this concept is freedom of choice and a prohibition of reinsurance would not be consistent. When one analyzes those things for which a supplemental insurance would be obtained there are procedures and situations where utilization has been high and with high priced procedures. The expectation would be that a supplemental insurance would be prohibitively costly for most people. Also, those who would be electing to use this Choice-Card approach would be people who were convinced that our present system is excessive and would be wanting to realize the savings for themselves. To purchase supplemental insurance would only propagate the systems from which they would have turned. Supplemental insurance would not be

encouraged and certainly not be offered within the operations of the Choice-Card concept.

When the amount of money entering the discretionary fund was determined, attention would be given to the use and operation of that fund. One concern about the fund is how the patients may view the money. It would be drawing interest to their benefit, but will that be sufficient to cause them to use it prudently? At least one lady with whom this idea was discussed would feel and act as if it was hers. "If that is my money, I want to have it and put it where it will draw the most interest," was her statement. The pooled funds of the patient's discretionary money could form the fund from which personal medical advances were financed. This could pose some problems in terms of interest rates charged and interest rates earned by the fund. There could be a segment of the participants who may be motivated to get maximum interest on their money, such as the young lady mentioned earlier. Others may feel that money borrowed for medical care should be at a low interest rate. This could present some political problems among the participating members. This could perhaps be solved by the participants electing at the time of their enrollment as to which philosophy they would want to follow. Those who wanted high interest could elect for their money to be pooled and invested in money market or other funds for a maximum yield with the understanding that if they were to borrow any money for medical care that it would be financed at the market rates perhaps through a medical credit card company. Those who elected to have low interest money available to finance their medical care would do so with the

understanding that their discretionary fund would be drawing an interest rate that was near the rate that they would be charged. If the discretionary fund were used to fund the cash advances for medical care this would create some concerns for the solvency of the fund.

It is proposed that any amount in the fund above a given minimum will be available for nonmedical uses. When the fund is near or above the minimum, patient behavior may be different than with the fund significantly below the minimum. When a trial of the concept was made it would be interesting to use a dual approach with regard to the discretionary fund. One group would start with a zero amount. The other group would be given some seed money for their fund, nearly equivalent to the minimum amount required for personal withdrawal. This would make the patients more immediately able to take personal advantage of cost effective usage of their discretionary fund. The difference in behavior of the two groups could be studied to learn if the one group were more motivated to cost effective behavior. For those given the benefit of the seeding money, we need not regard that as a permanent gift. A given amount could be withdrawn automatically each month. At a given period of time, the discretionary fund seeding would have been repaid and only the patient's own money would remain.

The level at which a patient could withdraw for personal expenditures would be determined best by input from insurance companies with experience on average patient usage for diagnostic tests. The challenge here would be to assure that sufficient is available for the patients elected medical needs, but also to have

sufficient in the discretionary fund to stimulate a choice in the use of the money. Setting this level would admittedly be arbitrary until such time as sufficient experience with this concept was obtained. Because the usage of medical services is generally increasing with age, the minimum level would prudently be increased with increasing age. This could be done each year or in increments of years, such as 2, 4, or 5.

The concept includes portability of the fund so as to not lose incentives for wise usage by those people who may change employers with some frequency. In the case of those who may have a seeded fund it would have to be clearly defined to exclude portability of the seed money. To discourage people from changing to a different type of insurance, for the purpose of using the discretionary funds for nonmedical expenditures, it could be required that a minimum period of time be stated for vesting that would allow portability. Any money in a discretionary fund below the minimum required would not be available for any nonmedical purchase, even though the subscriber may have disenrolled and have another type of medical coverage. Use to pay for health insurance premiums would be considered a medical use. If this concept were used in a national health insurance, changing of employment may not pose the concern with regard to portability.

One of the prime objectives in the choice-card approach is to cause the patient and the physician to be aware of alternative uses for the money that is spent in rather marginally effective ways, especially in illness that is terminal, such as cancer. The linking of

some term life insurance with the discretionary fund level would tend to require some evaluation and thought before embarking on a course which has minimal or no chance of curing or improving quality of life. The example of surgery in the mother with cancer of the ceacum referred to earlier in scenario seven would be an example. Using life insurance purchased on the basis of the amount in the discretionary fund would allow for some leverage of the money. In this way a decrease of $100 in the discretionary fund could be a decrease in thousands of dollars in death benefits. Death is a tragedy under any circumstances, especially when it is a parent on whom a family depends for income and support. It is of concern to many observers to witness large sums of money expended in futile efforts or very short term prolongation of a miserable existence. Then after the inevitable has occurred the family may be in debt and without a source of family income. This linkage of life insurance could allow a way for a father or mother to divert money from a useless and futile endeavor to a means of support and a degree of economic security for a bereaved family. This life insurance variation approach could be mandatory or optional. If it were optional, there could be problems with trying to obtain coverage when it was determined that a person had a likely terminal illness.

Disenrollment procedures would need to be clearly defined. Anyone who entered this would need to be educated and it would take time for them to learn the system. It would require a fairly significant amount of training and education of the patients for them to make a choice as to their desire to participate in the first place. A

minimum of one year, and perhaps more, should probably be required before disenrollment is permitted in most circumstances. Such requirements are often used in disenrollment from an HMO.

SUMMARY

That there will be some control of medical cost seems to be a foregone conclusion. The question of those who will control cost is less clear. The current political environment is favoring a pro-competitive solution. Medical care is not inherently adapted to the marketplace forces because of its unique consideration in society as a right, and the lack of the patient as a knowledgeable consumer. A review of the cost-containment literature has very little comment about the role of the patient in this task. He has been referred to as a "breathing brick,"(Goldsmith 1981) obviously inferring a very passive role. Evidence is presented that the public is rather willing to accept changes in the medical care delivery and financing. There are many reasons to feel that this containment of medical care costs would best be worked out between the patient and his physicians.

A concept of financing medical care is described in which the role of the patient is greatly expanded. It would require his participation in decisions about his medical care, with financial incentive to choose the most cost effective care. The role of a patient's primary physician is discussed and a suggested way of altering his reimbursement and incentives is outlined. This partial capitation method of reimbursement for the primary care physician, when combined with the insurance incentives for the patient, would place him in a different, but very crucial relationship with his

patients. This would deemphasize the physician's role as a performer of procedures, to which our current system gives so much incentive. He would be, in addition to a provider of primary care, a teacher, financial manager, and counselor to his patients as they respond to the built in cost-effective incentives of the insurance system.

Some of the major factors contributing to rising health care costs have been viewed with the consideration of the potential impact on those factors as a patient, and his primary care physician, sought to utilize a unique financing system called Choice-Card. Where and in what circumstances would this best be tried? How could it be implemented? Does it have potential to help us in our current dilemma? Arguments and discussion have been presented of its potential benefits. Consistent with our American tradition of free choice, we as a society may be able to discharge our responsibility to provide access to medical care, have control on costs, and still allow a maximum expression of individual choice.

The emphasis of this concept will encourage the patient to share in the risk of cost-containment with his reaping the benefit of wise use of his health care voucher. That there will be fixed budgets seems to be inevitable. Physicians in general are not accepting of fixed budgets, but have become accustomed to dipping into the deep pockets of the insurance company, or the government, to provide all of the services that they or their patients perceive as possibly helpful. Having enjoyed this relatively unfettered freedom for so long it is quite possible that the best way to influence the patient and the physician to a posture of dealing effectively with this most difficult

problem of medical care costs is to make that fixed budget the patient's budget. This may be more acceptable than the fixed budget of the faceless insurance company, HMO, or the government.

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